DUAL INDUCTION LOG

Company MULL DRILLING COMPANY, INC.
Well CARTER #2-30
Field ROADRUNNER
County CLARK State KANSAS
Location: API # : 15-025-21620-0000
2781' FNL & 1568' FWL
NE/4 - SW/4
SEC 30 TWP 32S RGE 23W
Permanent Datum GROUND LEVEL Elevation 2245
Log Measured From KELLY BUSHING 8' A.G.L
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL/PE
MEL/SON
Elevation
K.B. 2253
D.F. 2251
G.L. 2245

Date	11/14/22				
Run Number	ONE				
Depth Driller	7061				
Depth Logger	7063				
Bottom Logged Interval	7061				
Top Log Interval	00				
Casing Driller	8 5/8" @ 731				
Casing Logger	731				
Bit Size	7 7/8				
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3,400 PPM			
Density / Viscosity	9.2/54				
pH / Fluid Loss	9.5/6.8				
Source of Sample	FLOWLINE				
Rm @ Meas. Temp	1.30 @ 50F				
Rmf @ Meas. Temp	.975 @ 50F				
Rmc @ Meas. Temp	1.56 @ 50F				
Source of Rmf / Rmc	MEASUREMENT				
Rm @ BHT	.451 @ 144F				
Time Circulation Stopped	3 HOURS				
Time Logger on Bottom	3:00 A.M.				
Maximum Recorded Temperature	144F				
Equipment Number	3802				
Location	HAYS, KANSAS				
Recorded By	COLE ROBBEN				
Witnessed By	BLAKE MILLER				

<<< Fold Here >>>

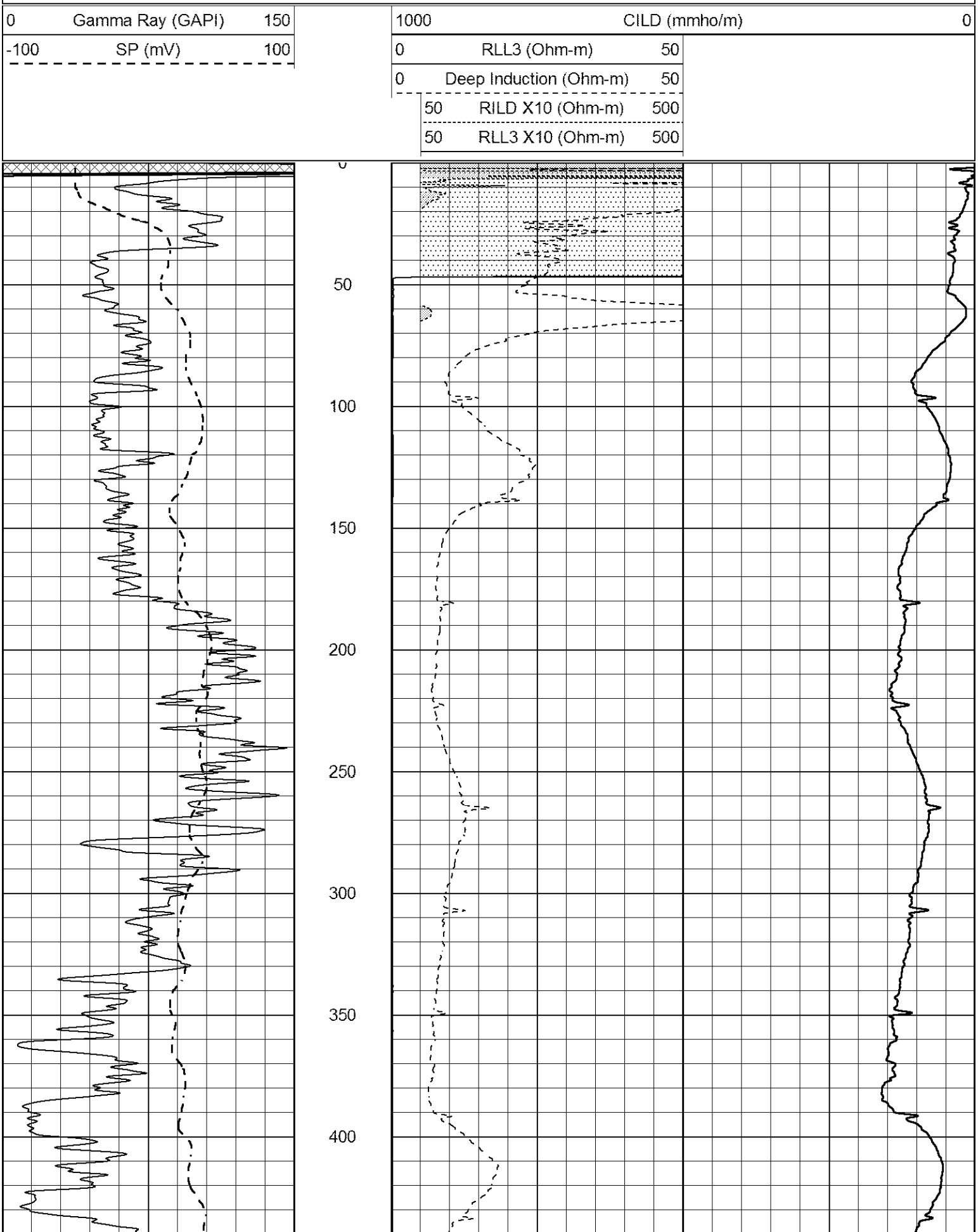
Comments

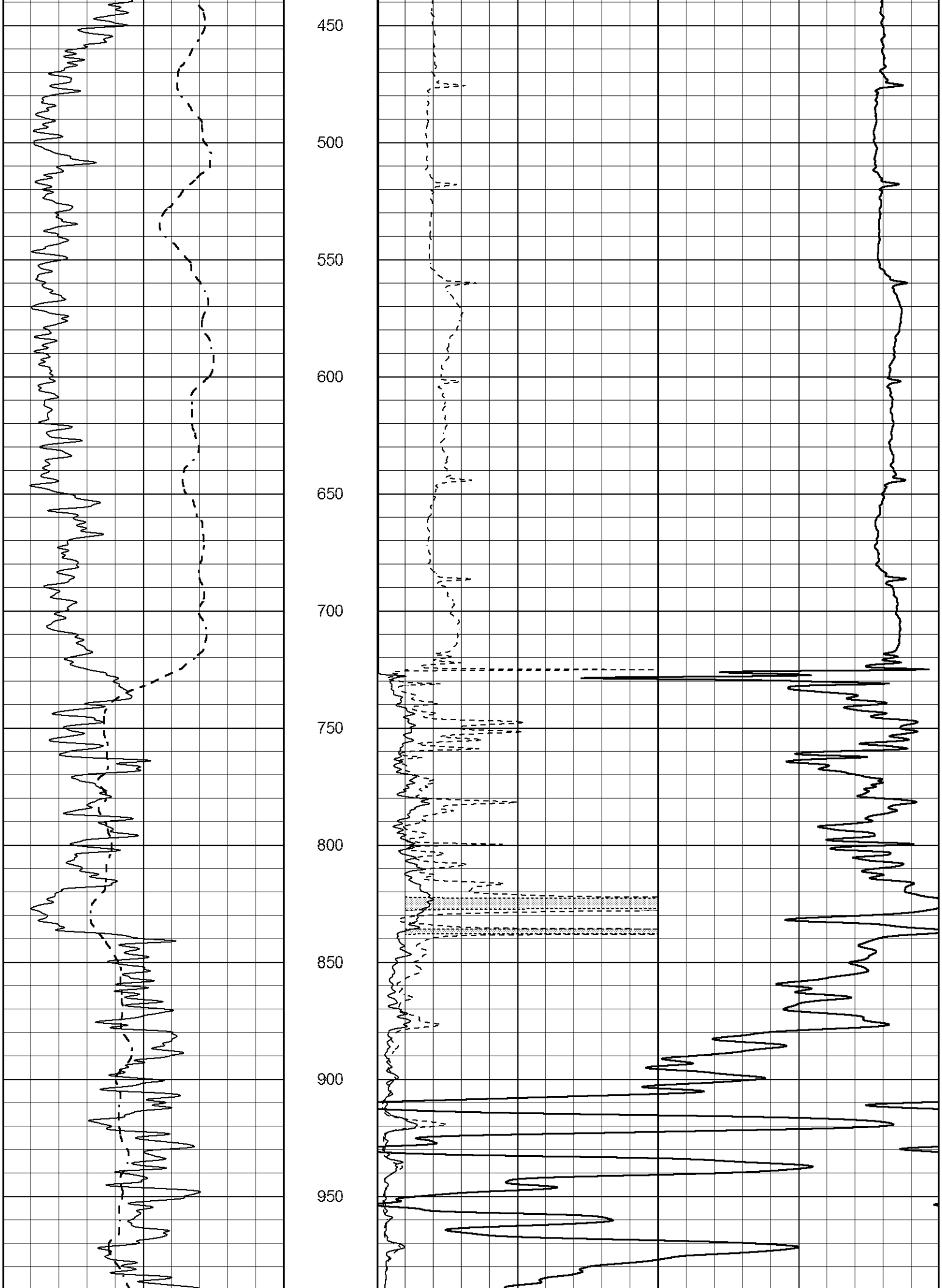
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

DIRECTIONS:
FROM ASHLAND GO 3 MILES WEST ON HIGHWAY 160, 3/4 MILES NORTH ON CREEK 15 ROAD, NORTH OVER CATTLE GUARD PAST HOUSE, FOLLOW LEASE ROAD 2 MILES

MAIN SECTION

Database File	7249pe.db
Dataset Pathname	pass3M
Presentation Format	_dil2
Dataset Creation	Mon Nov 14 06:44:26 2022
Charted by	Depth in Feet scaled 1:600

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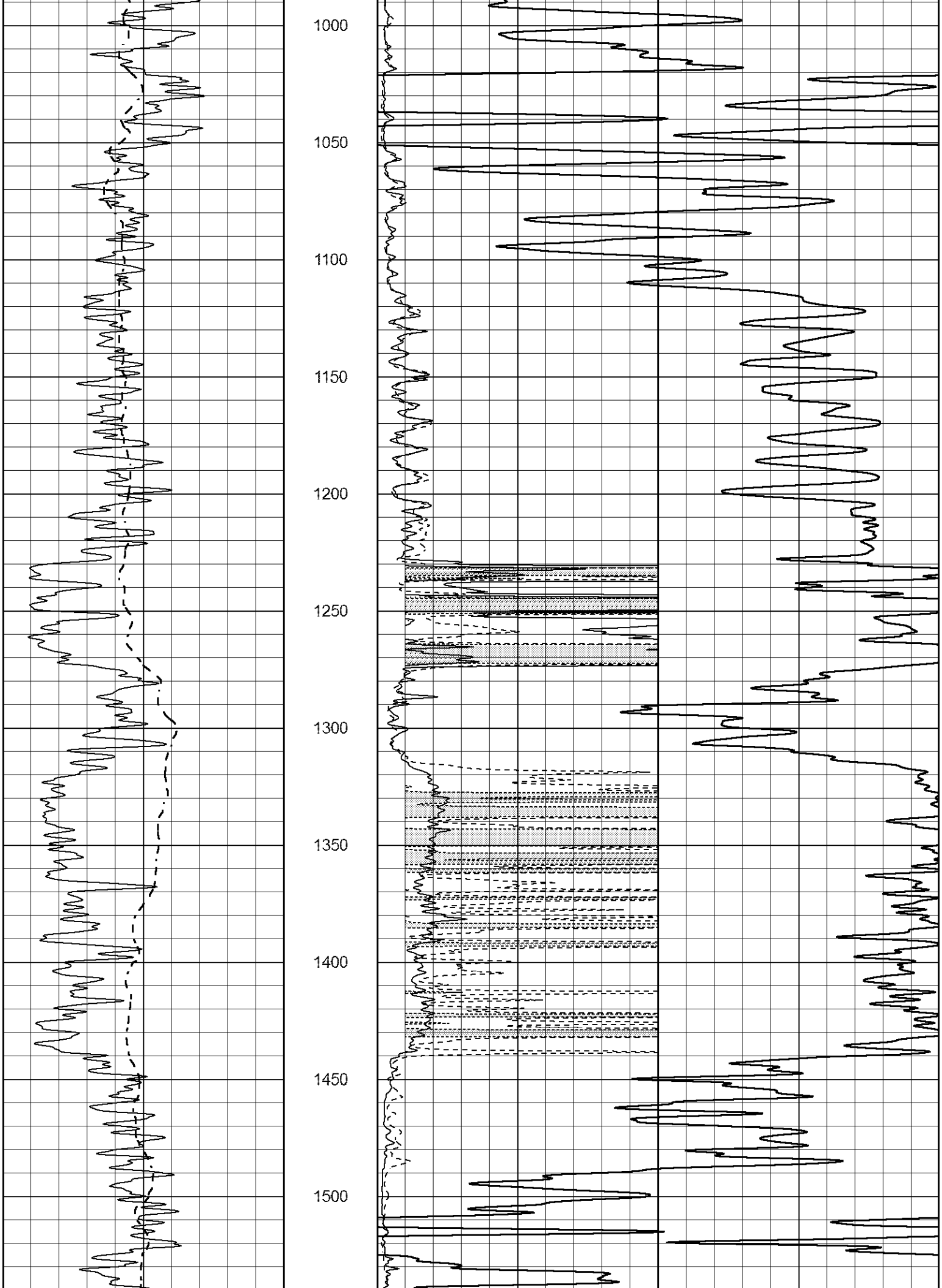
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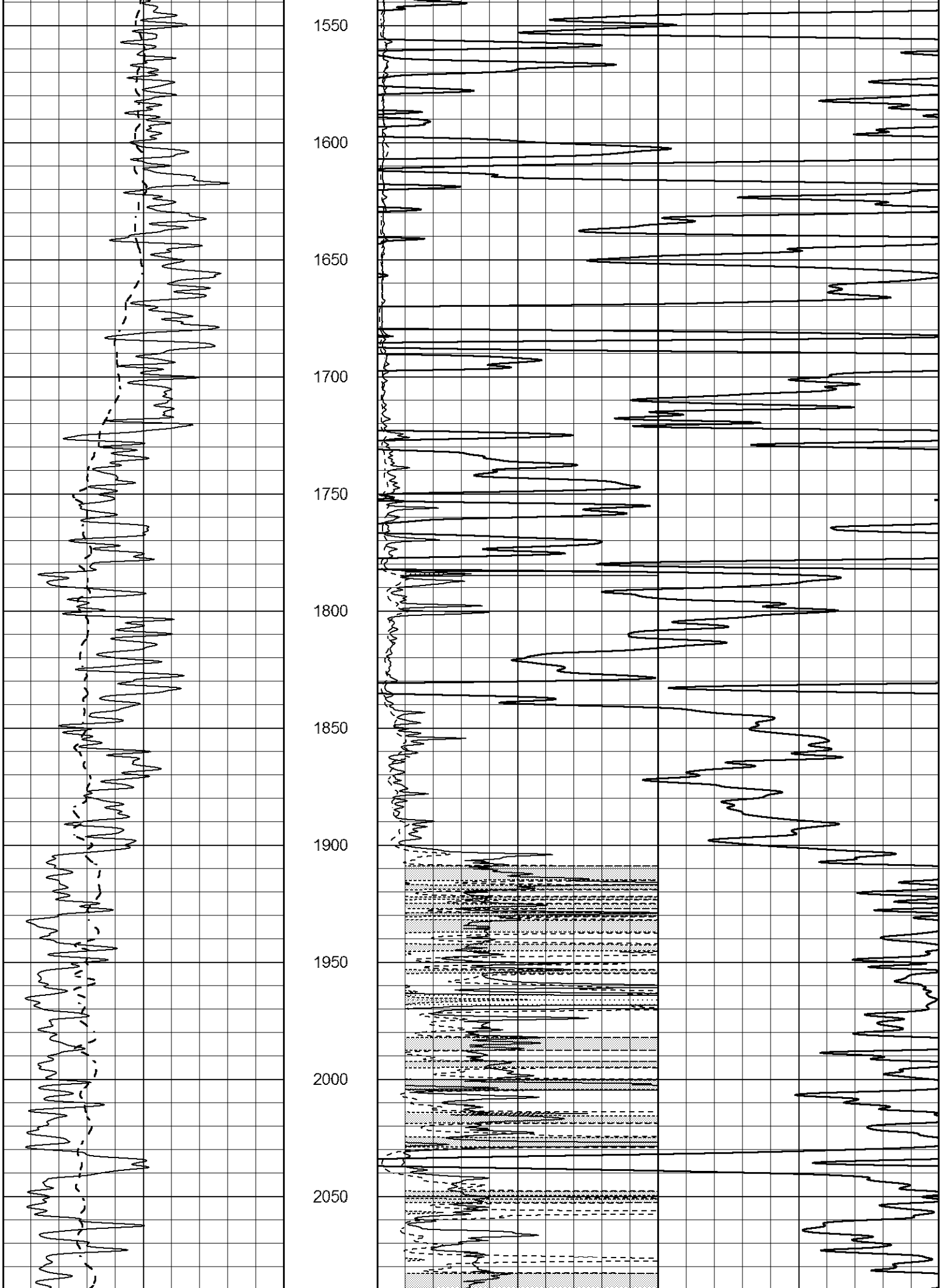
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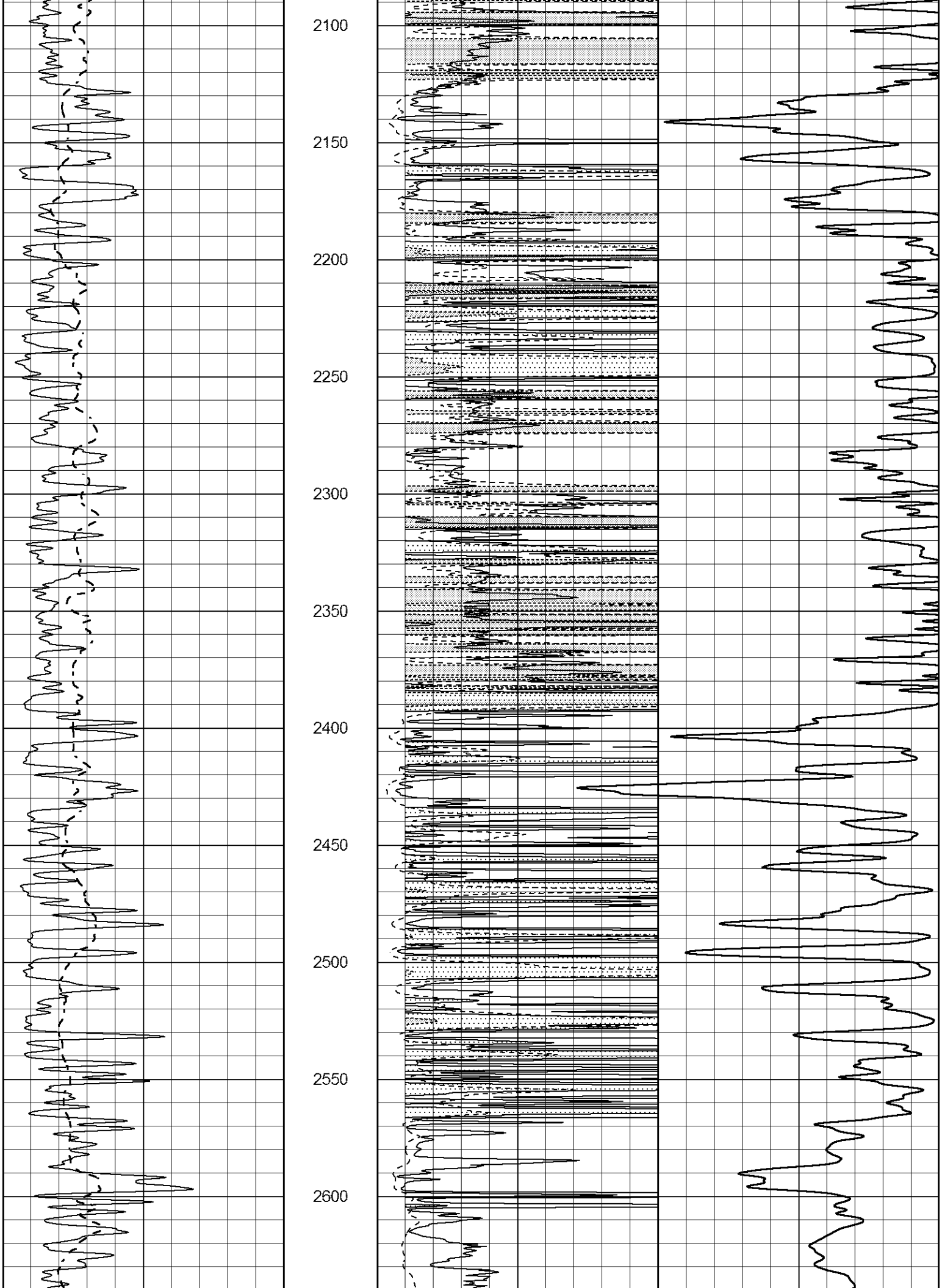
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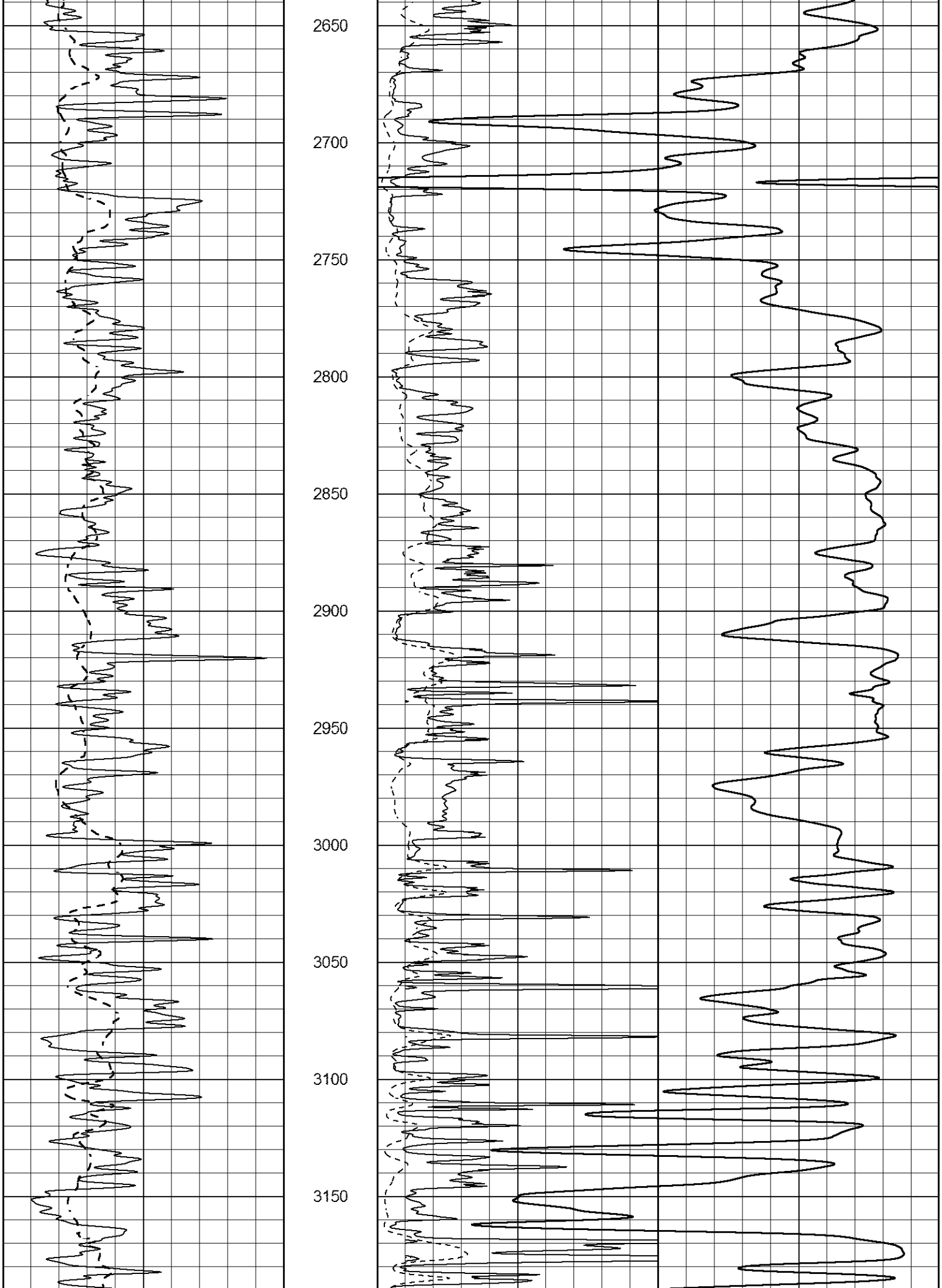
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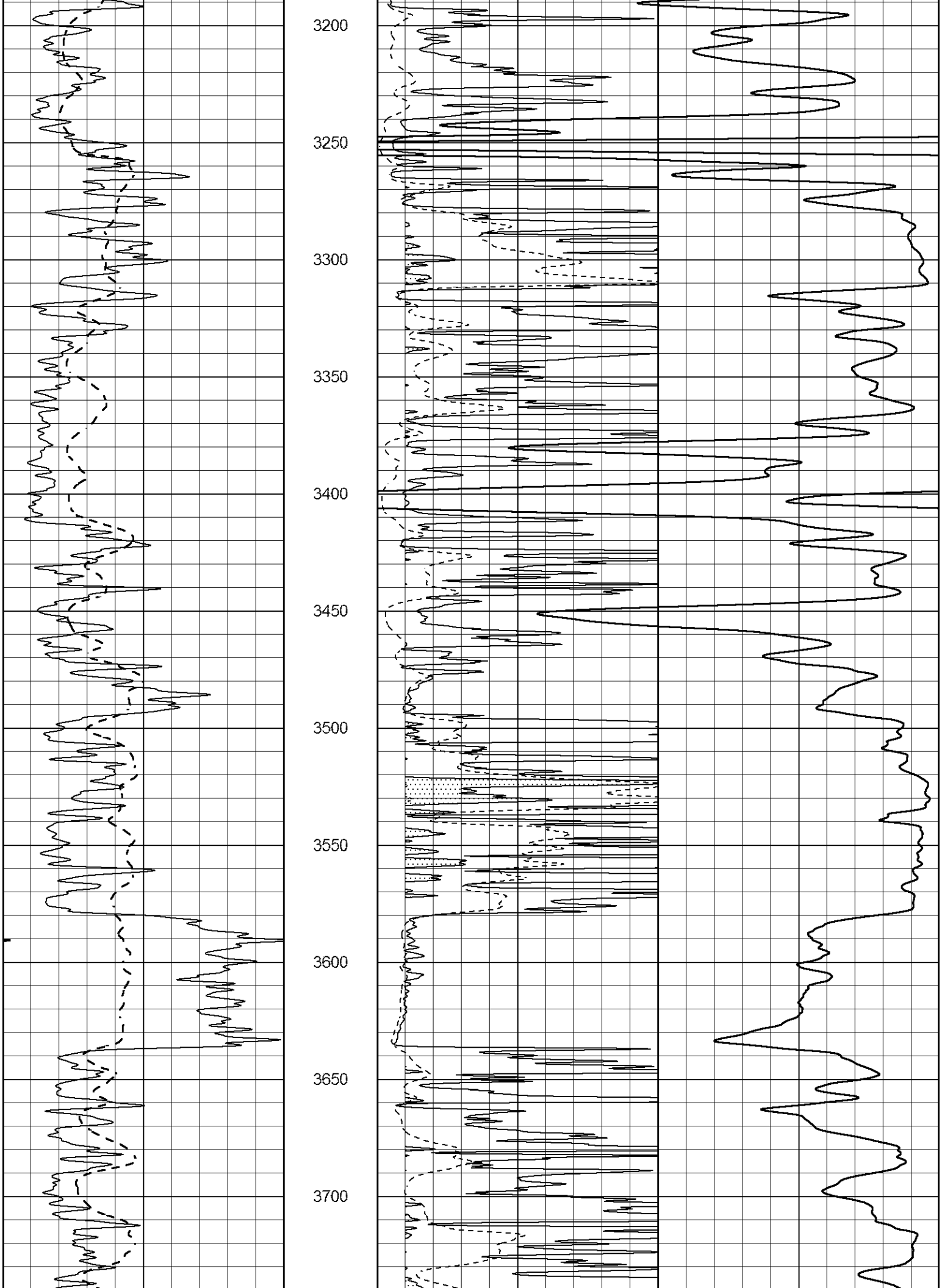
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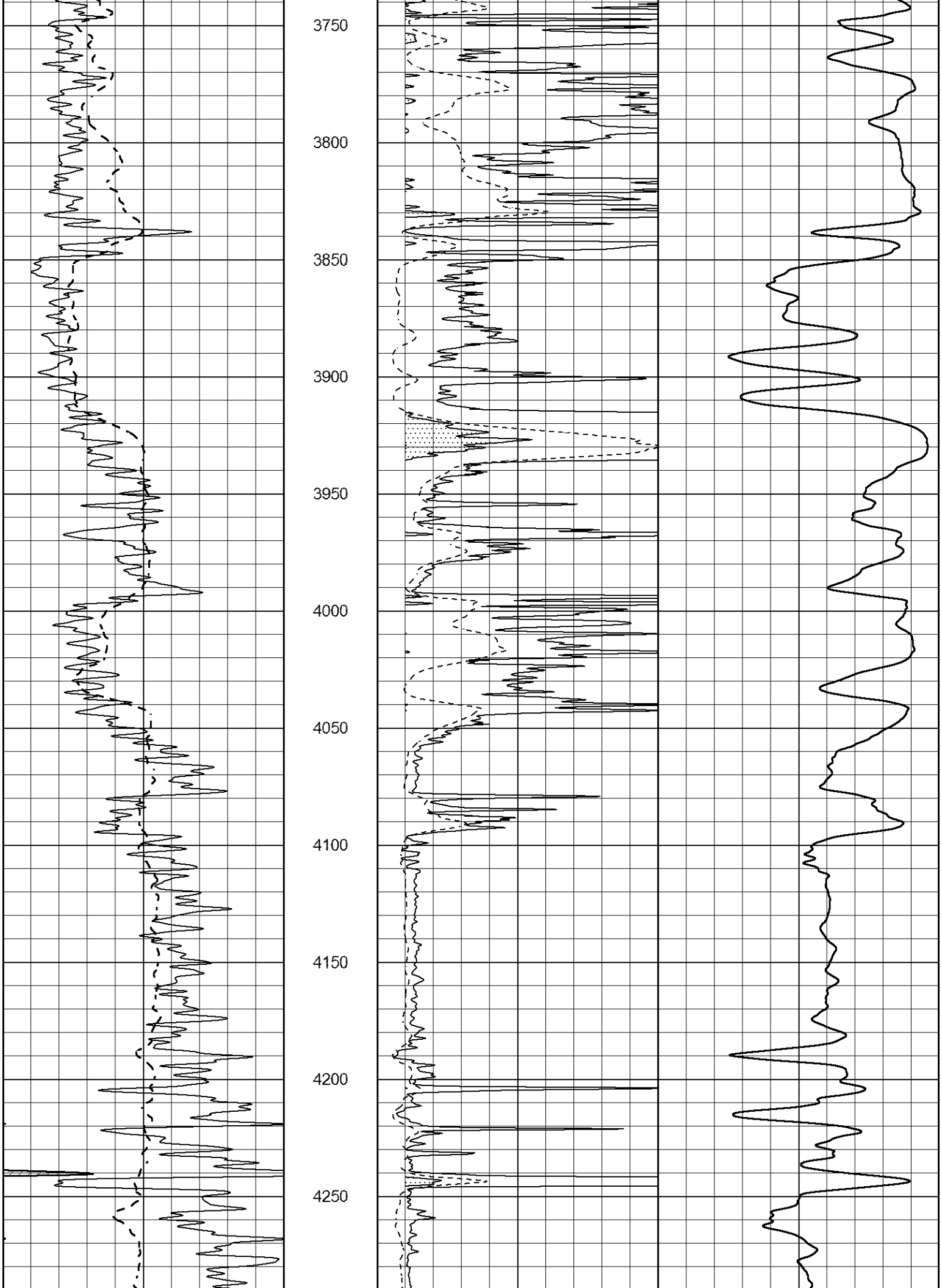
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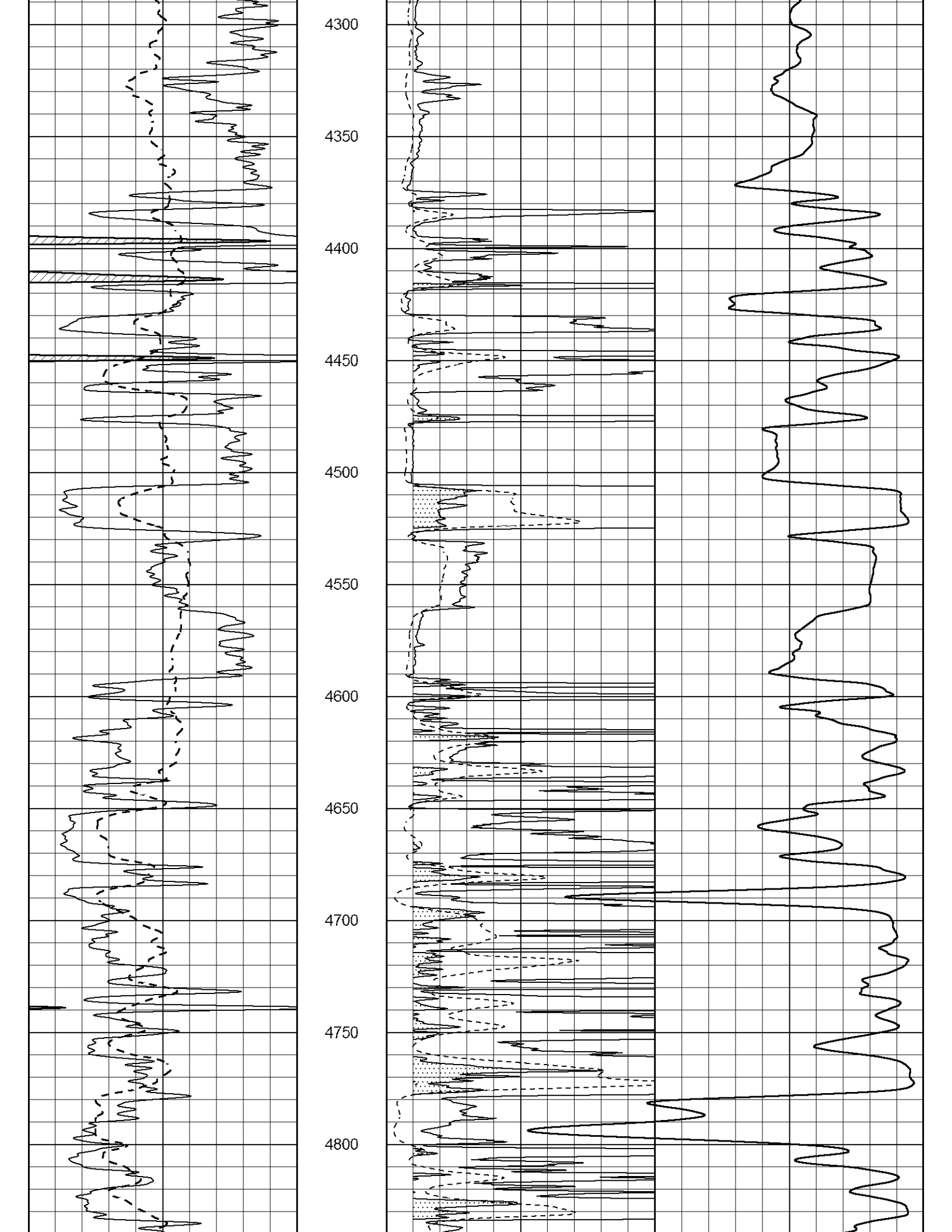
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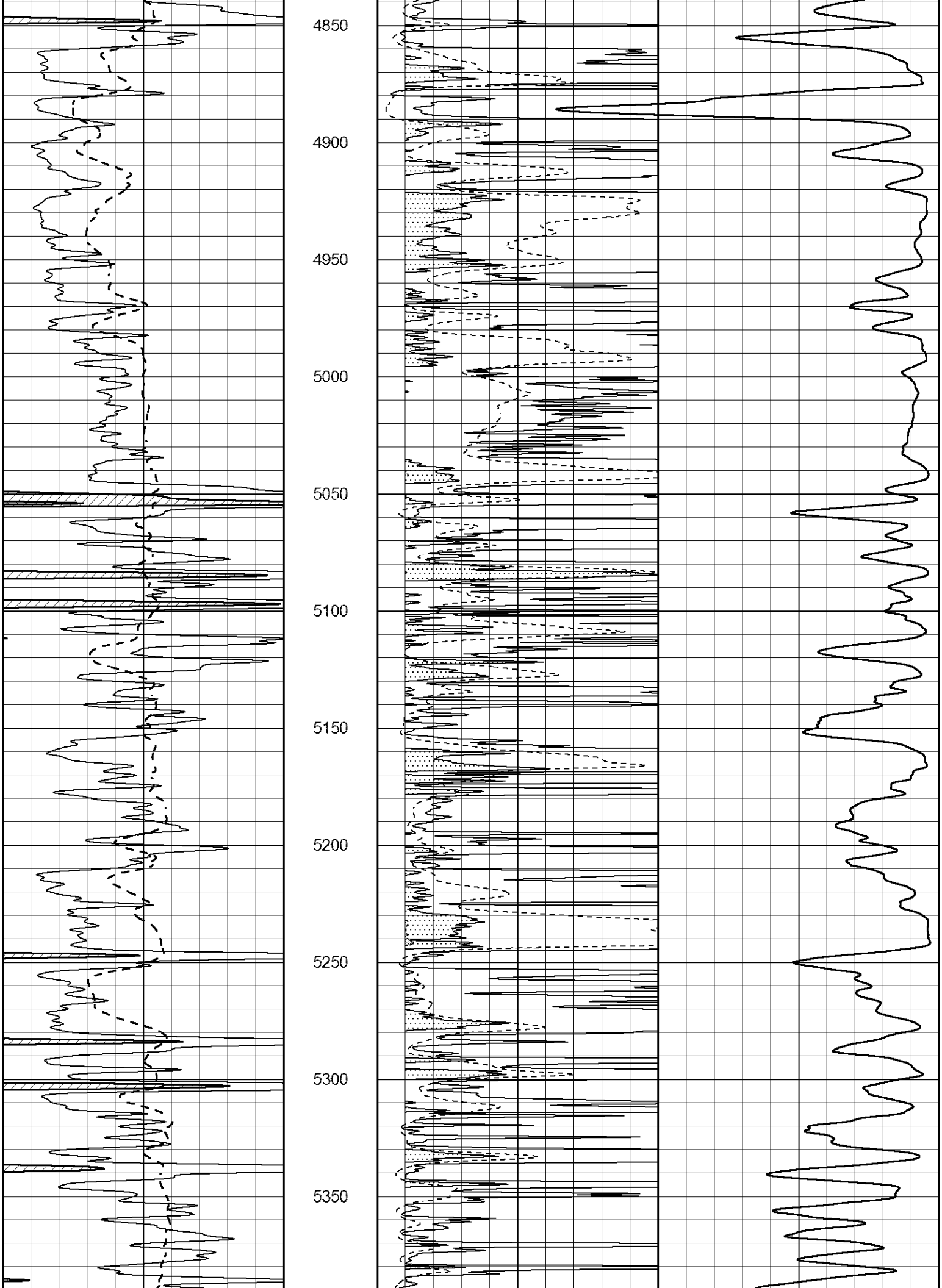
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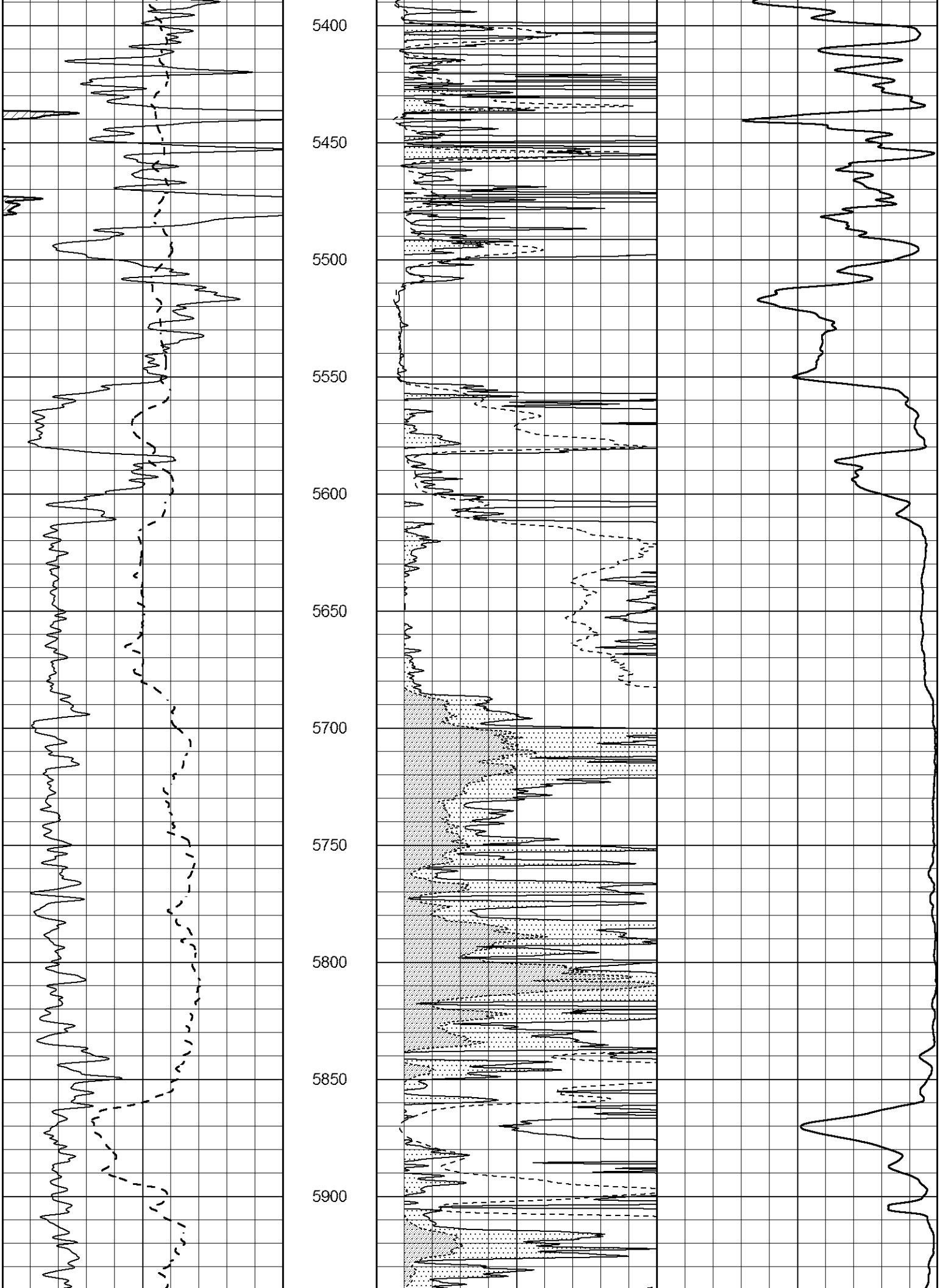
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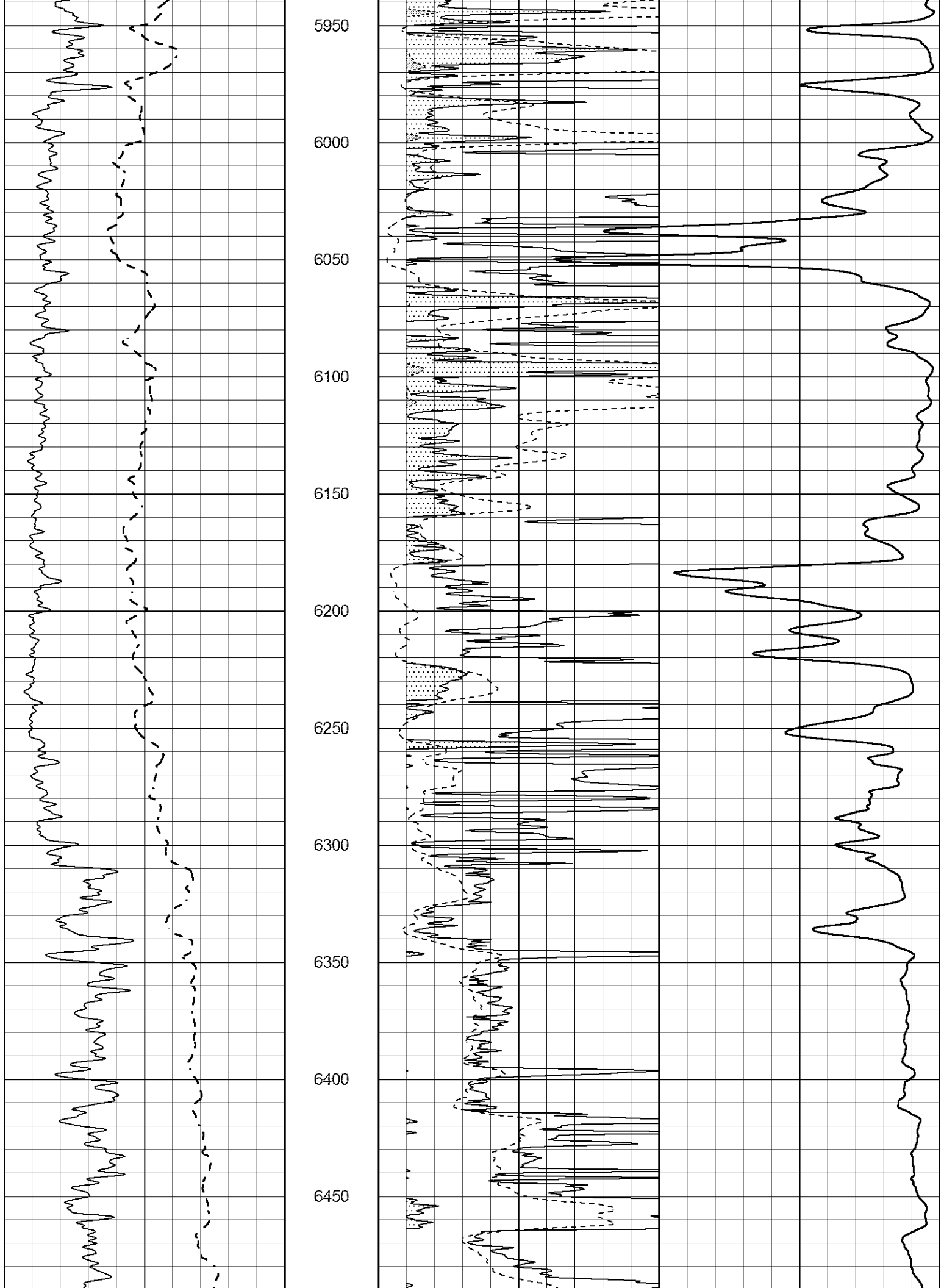
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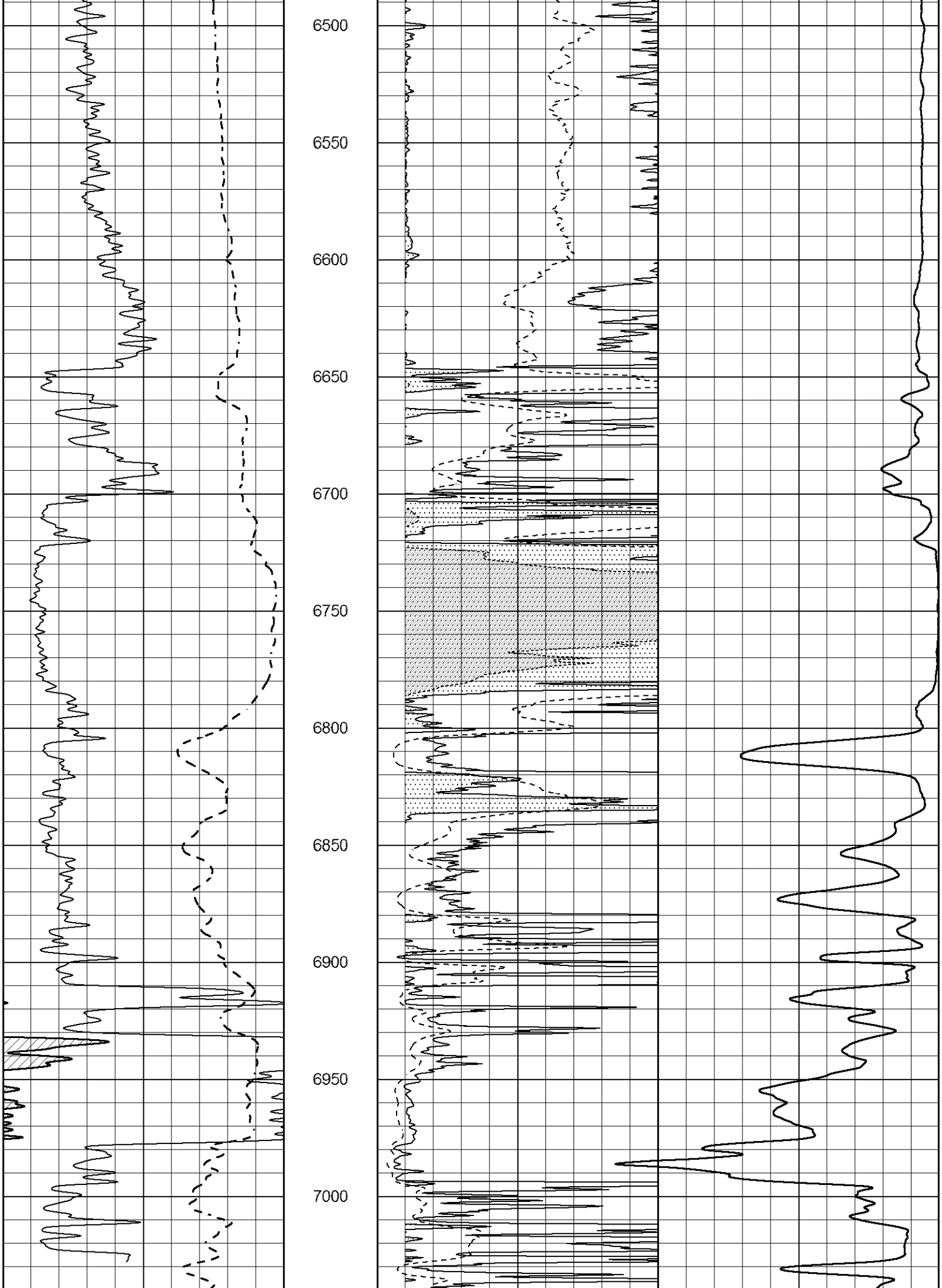
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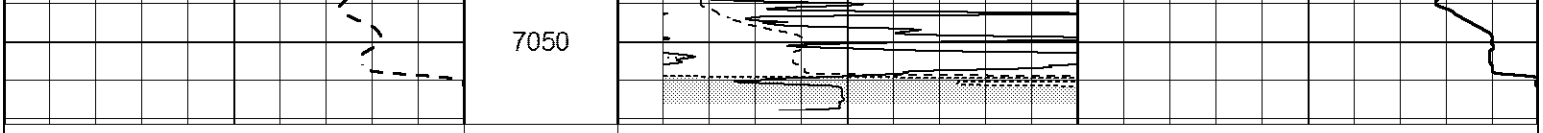


0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

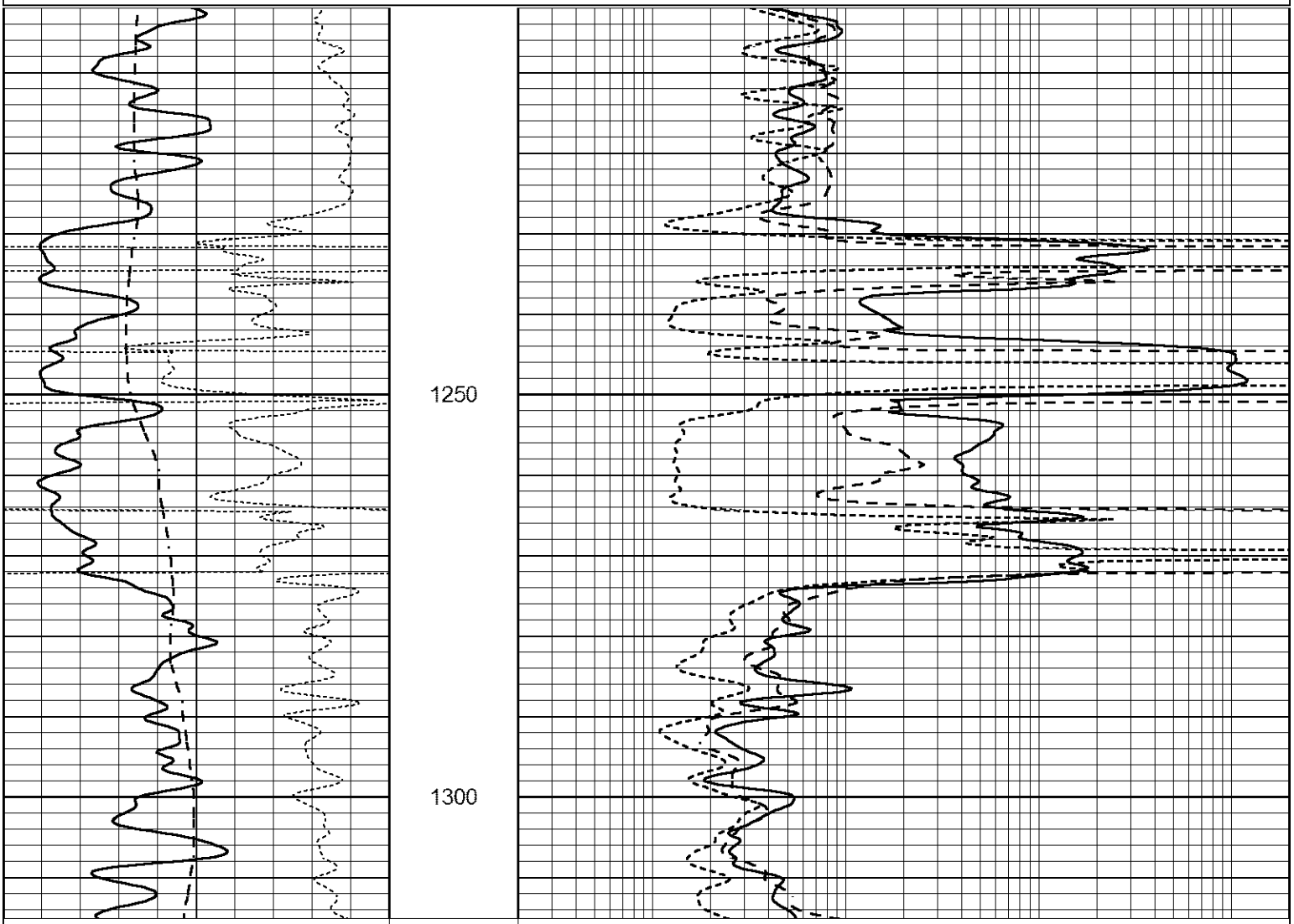
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

ANHYDRITE

Database File	7249pe.db
Dataset Pathname	pass3AN
Presentation Format	_dil
Dataset Creation	Mon Nov 14 06:54:49 2022
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

-100	SP (mV)	100
-250	Rxo/Rt	50

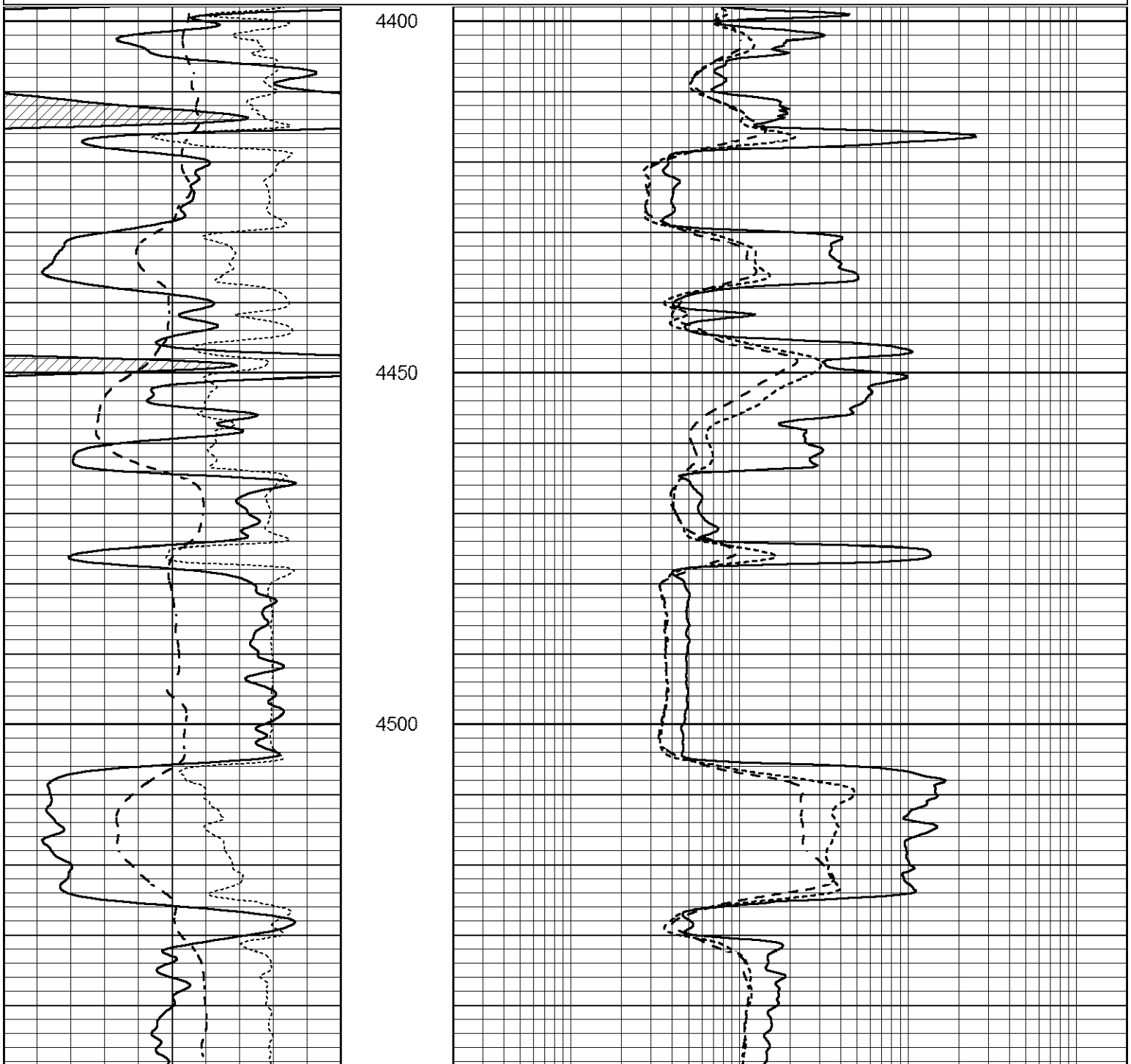
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

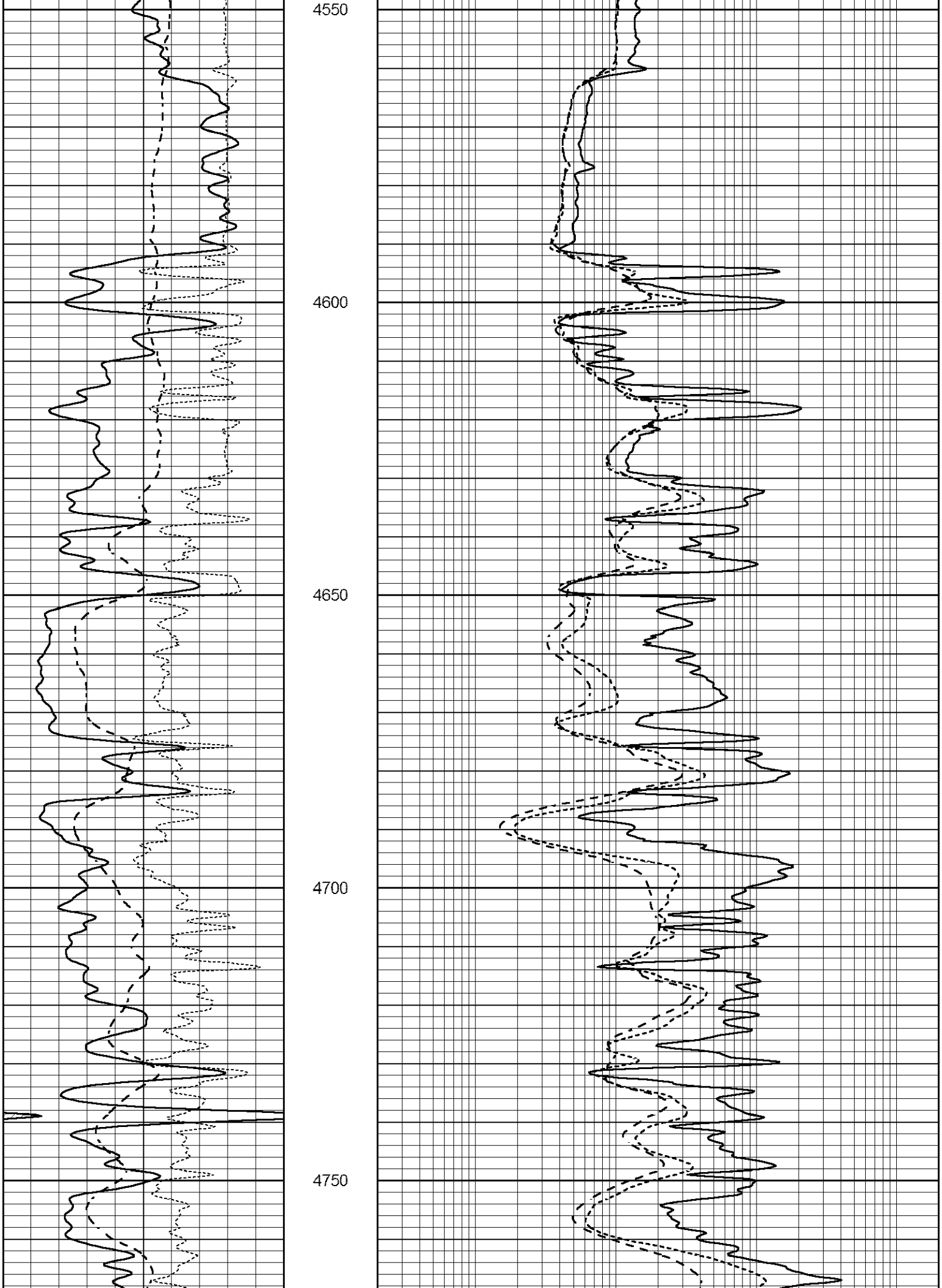
MAIN SECTION

Database File	7249pe.db
Dataset Pathname	pass3M
Presentation Format	_dil
Dataset Creation	Mon Nov 14 06:44:26 2022
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

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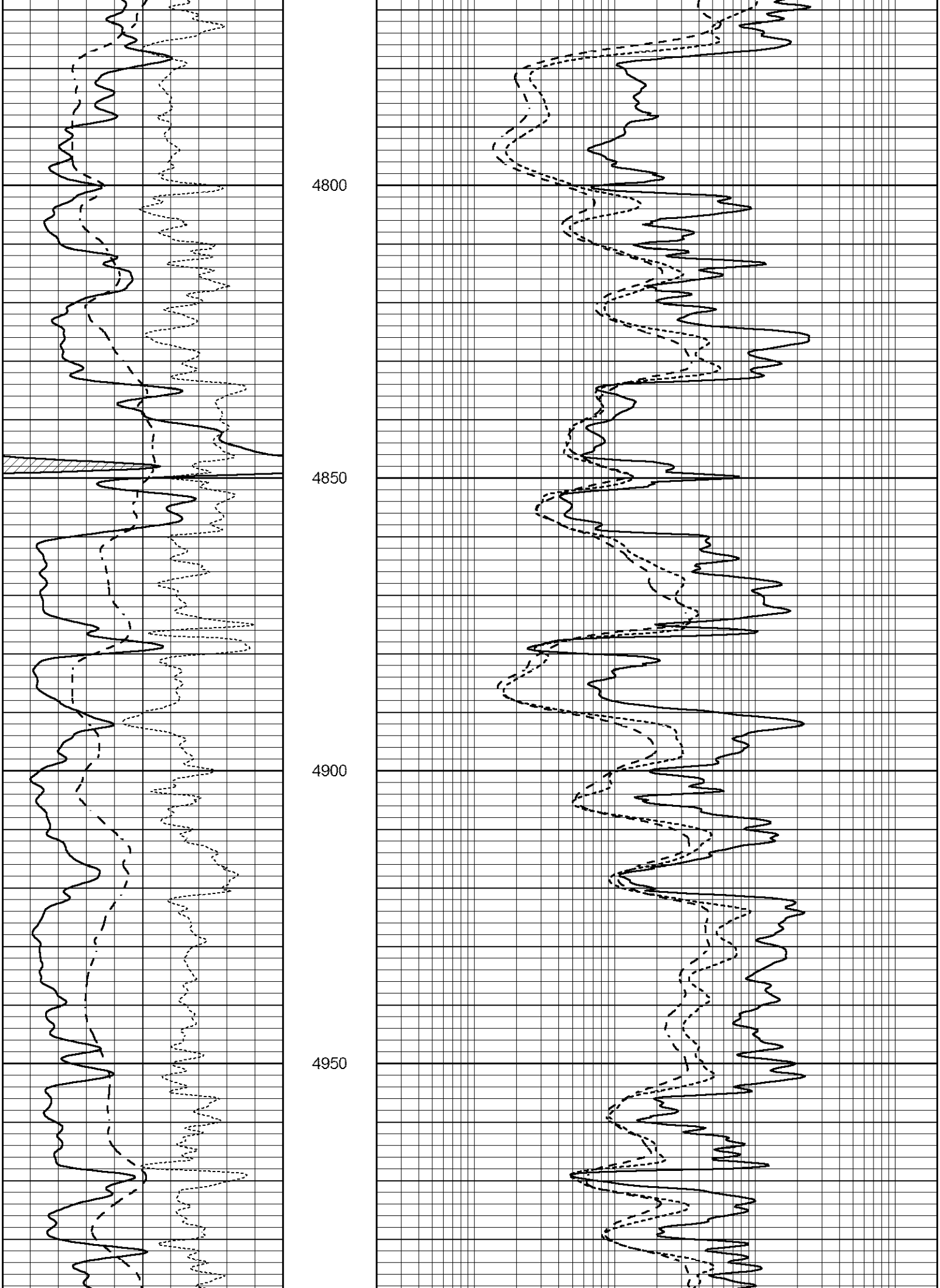
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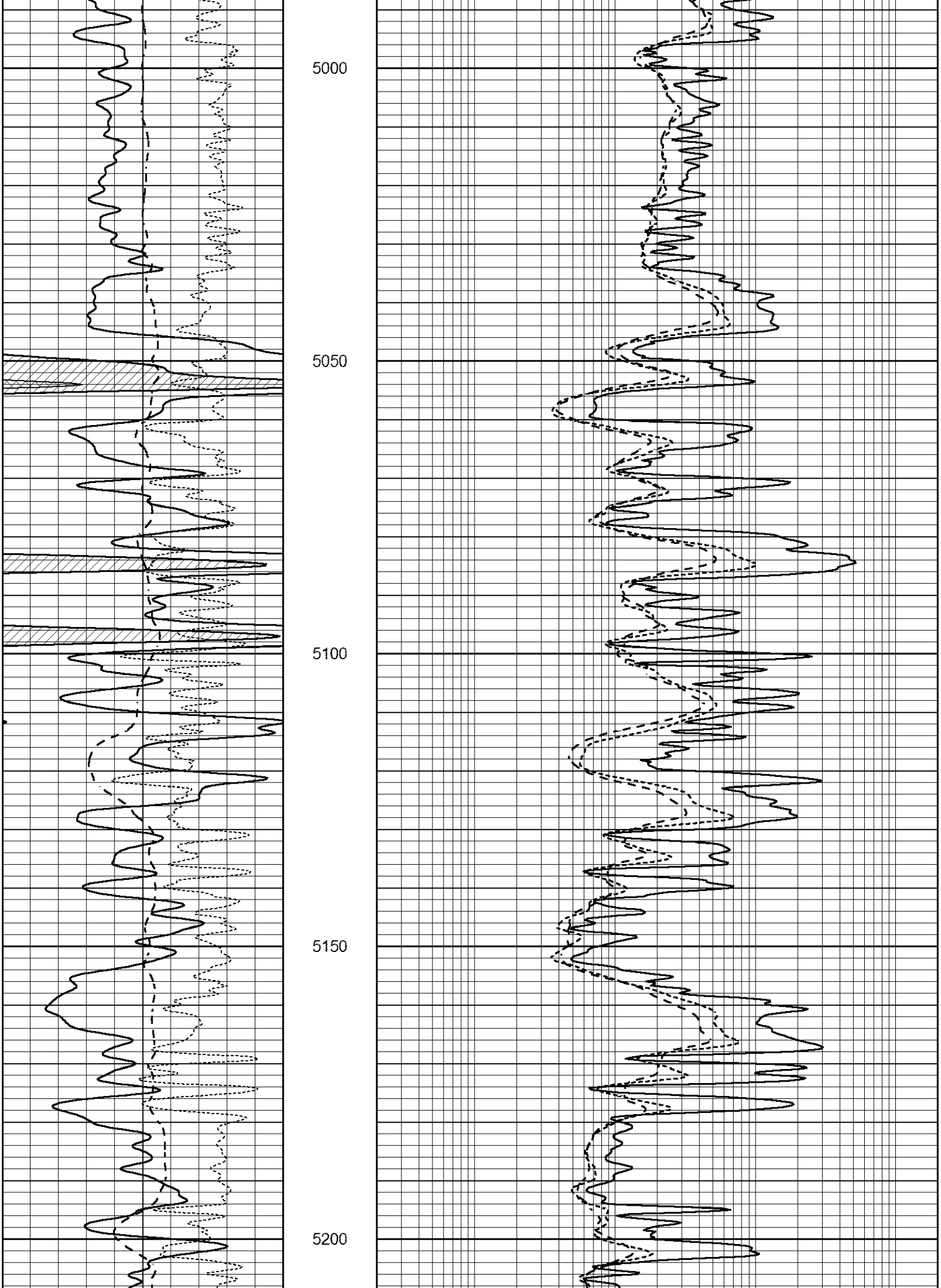
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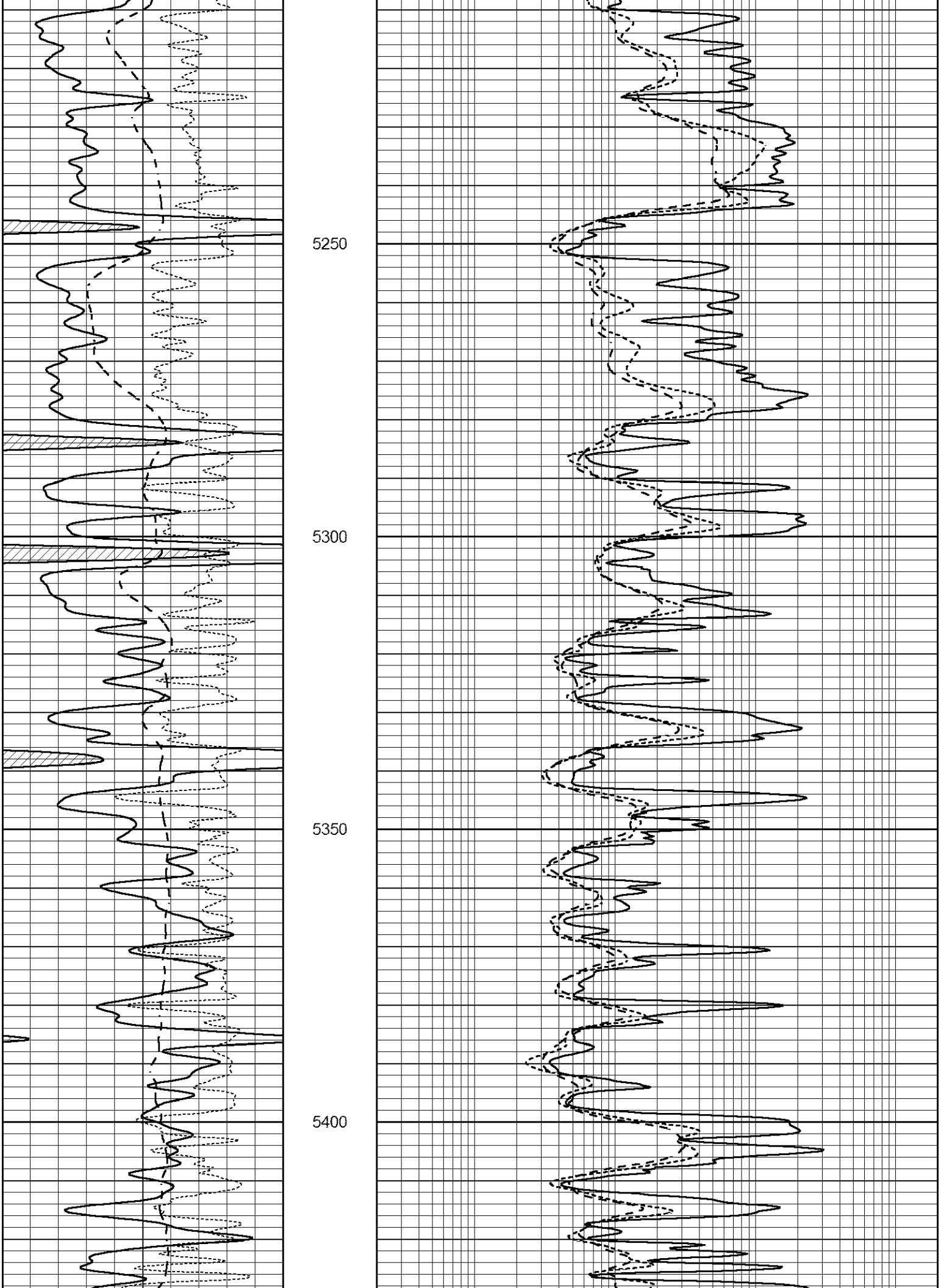
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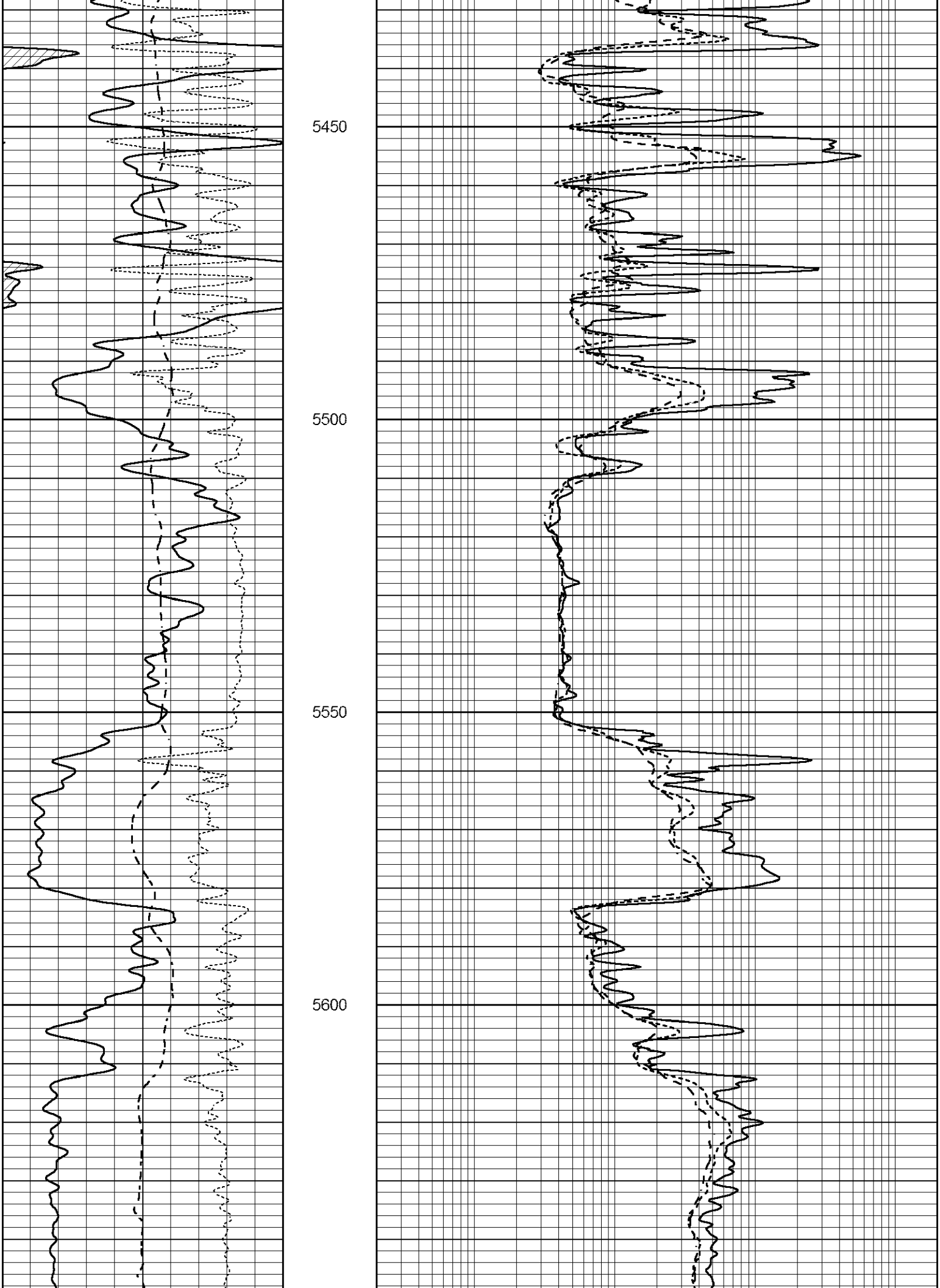
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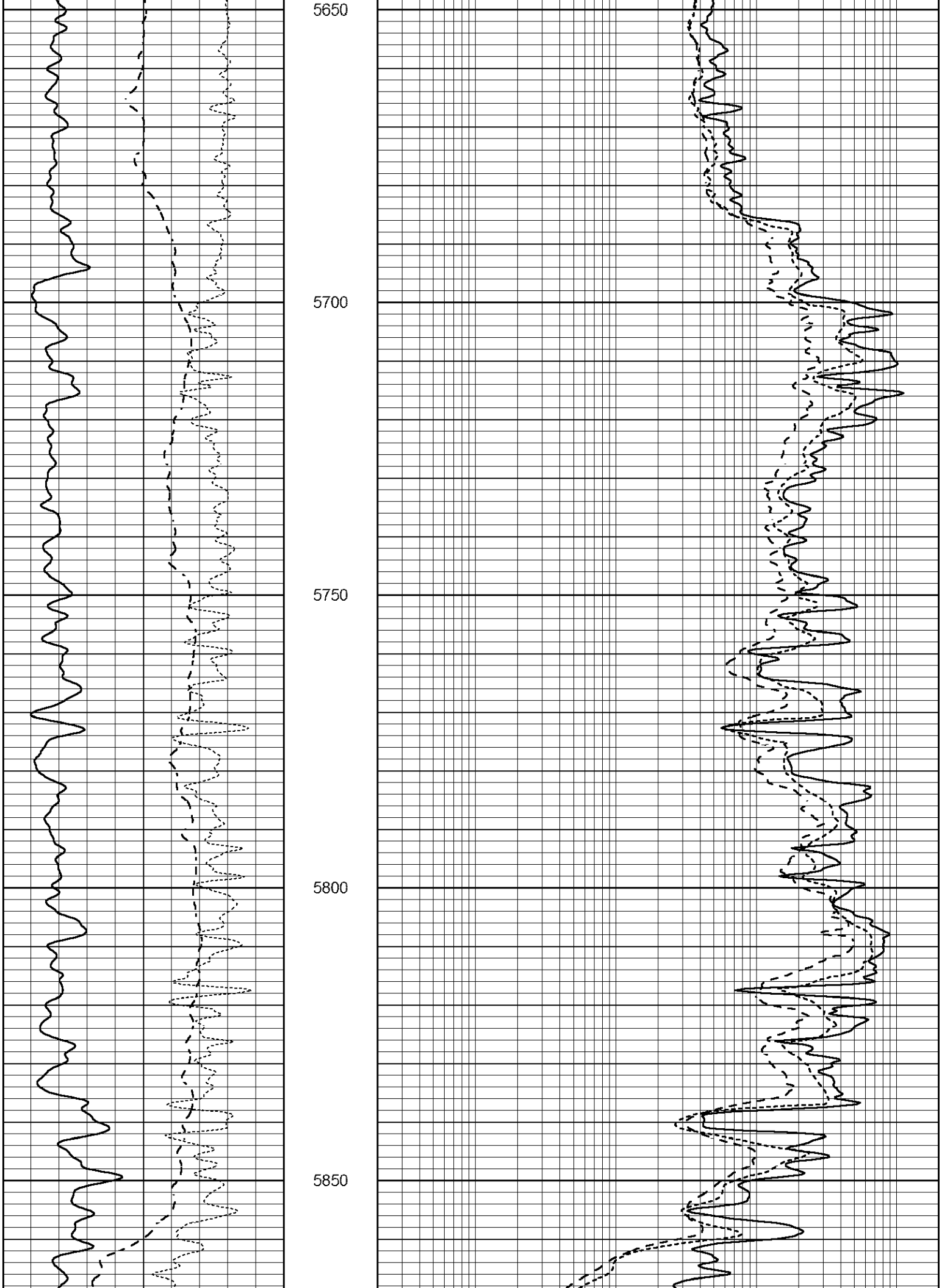
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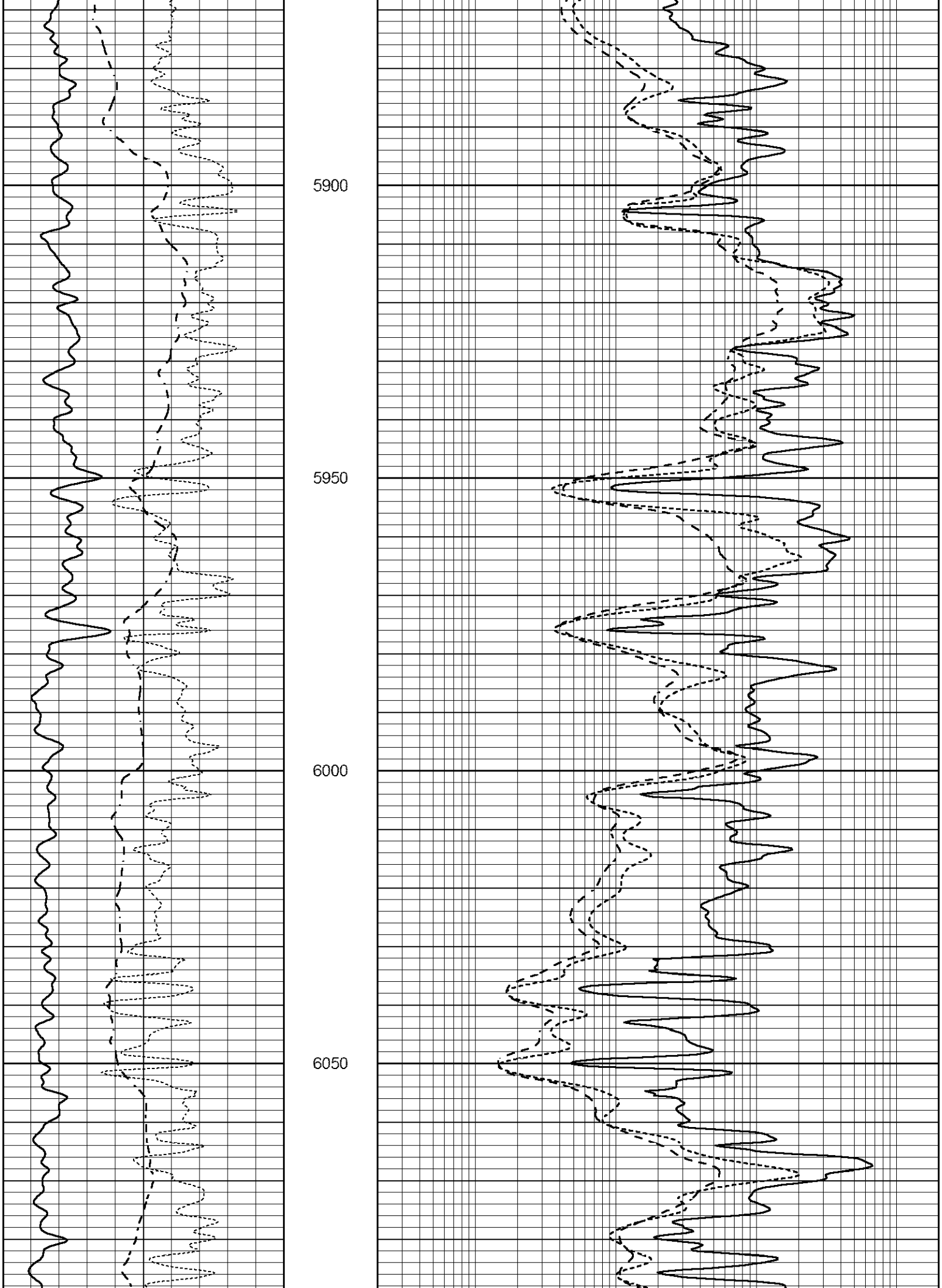
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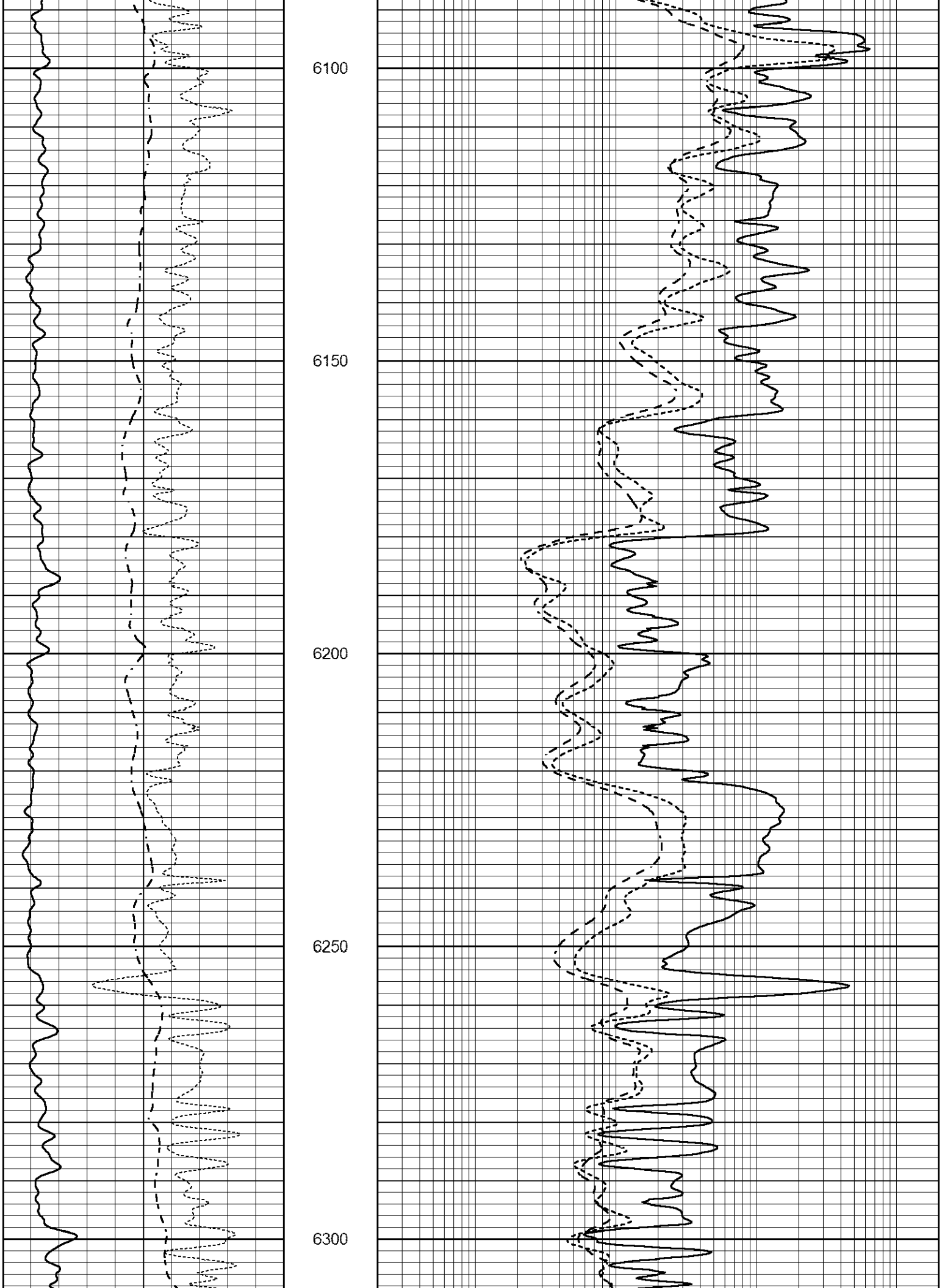
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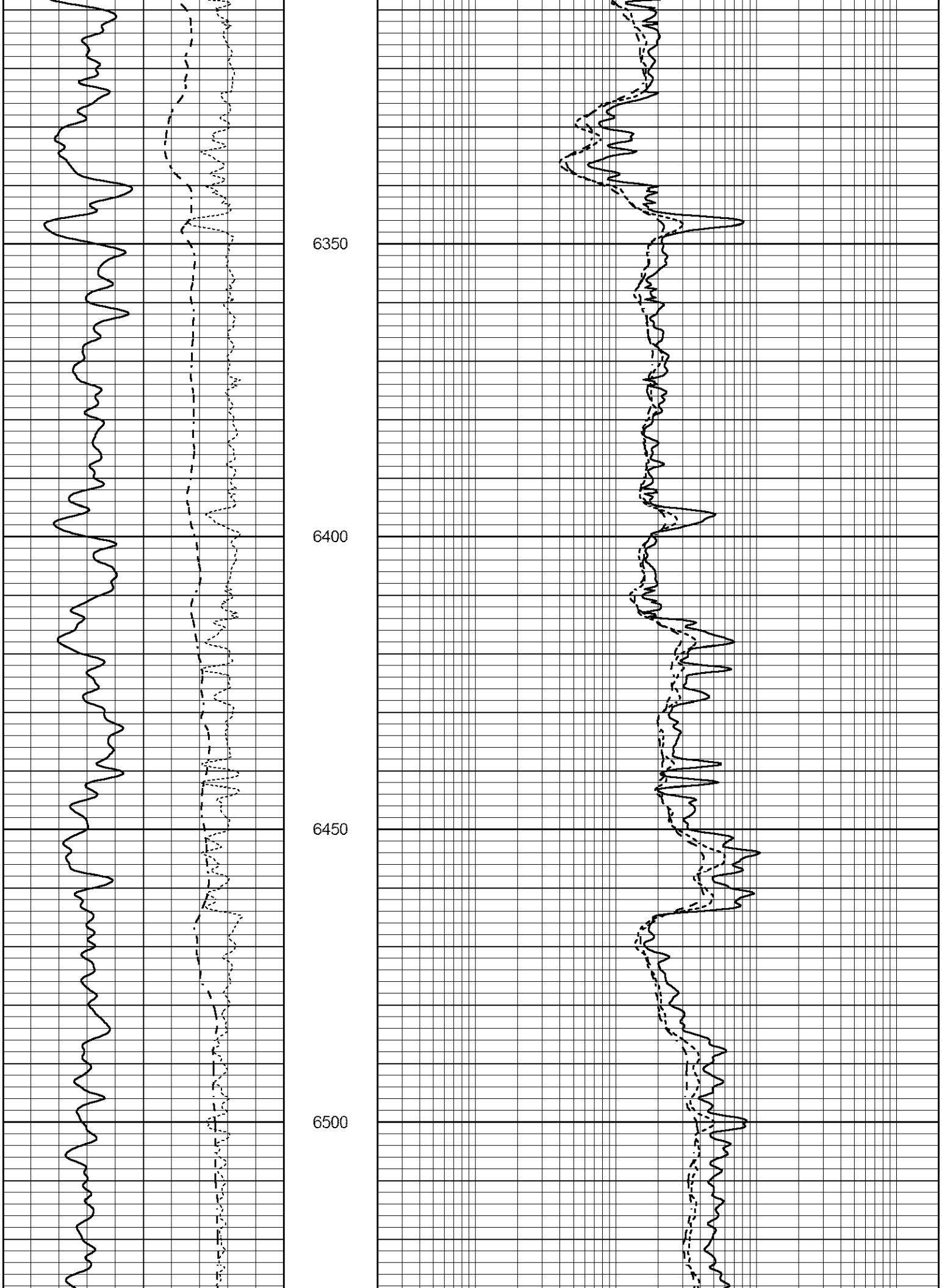
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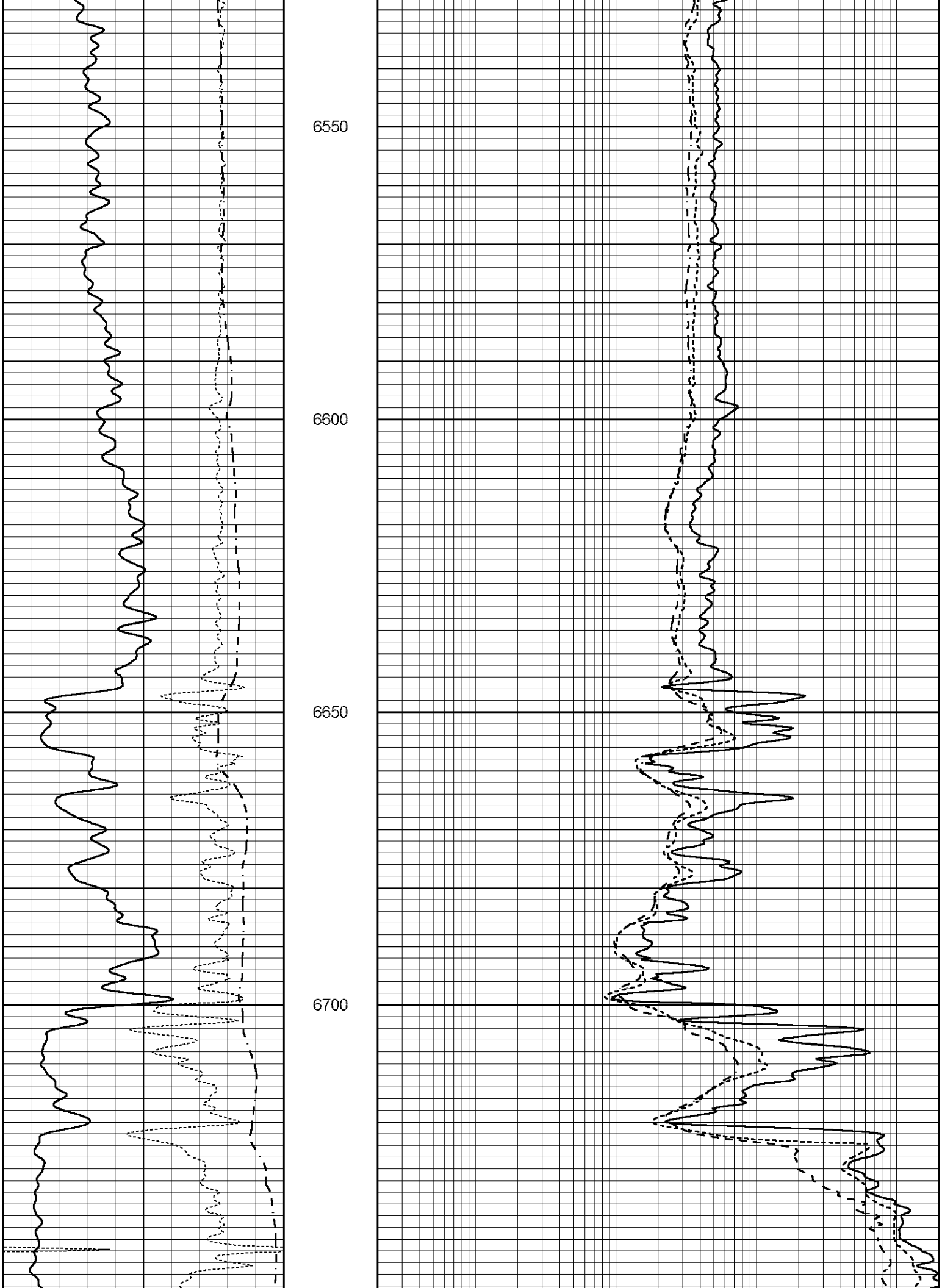
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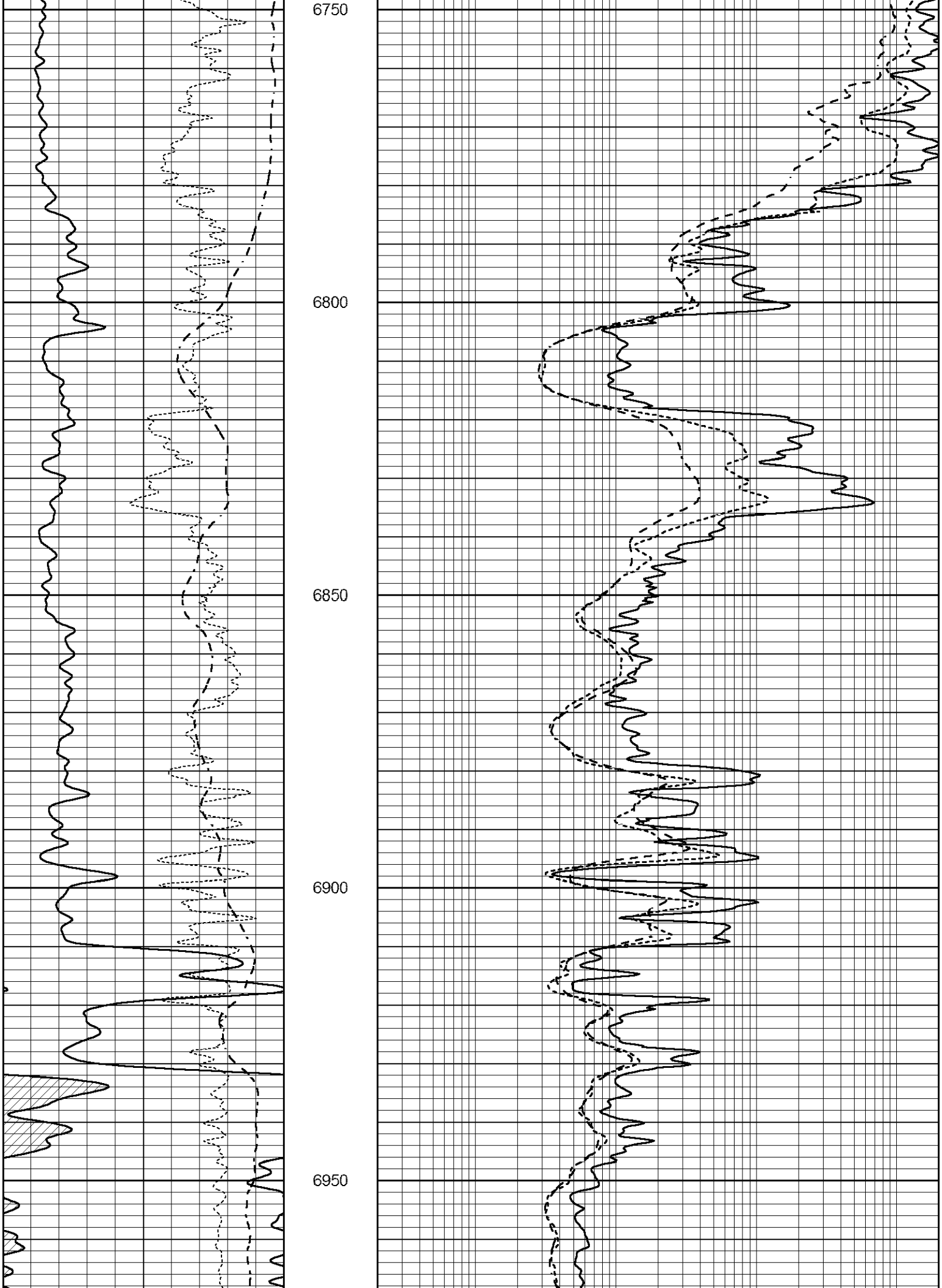
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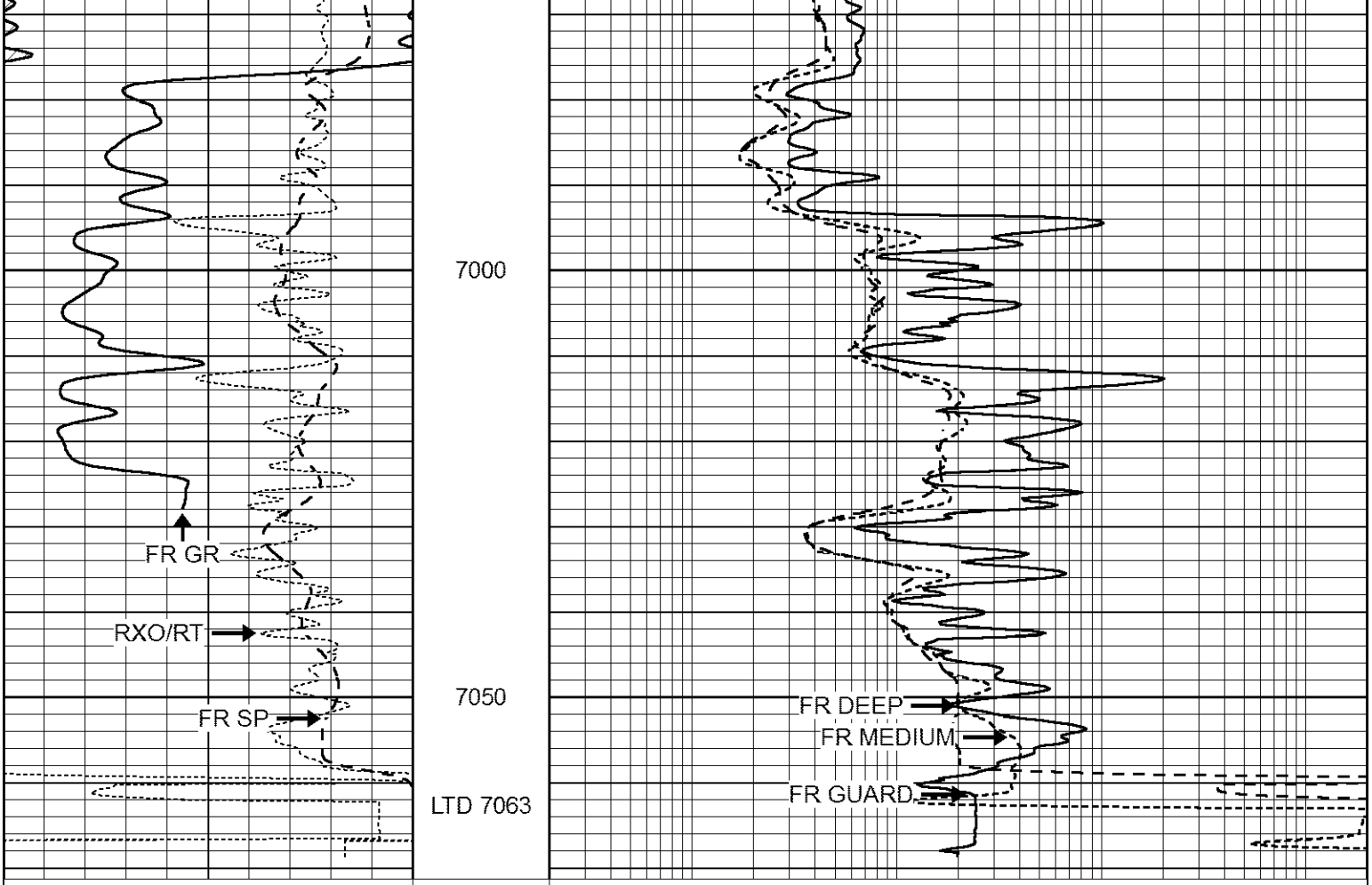


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

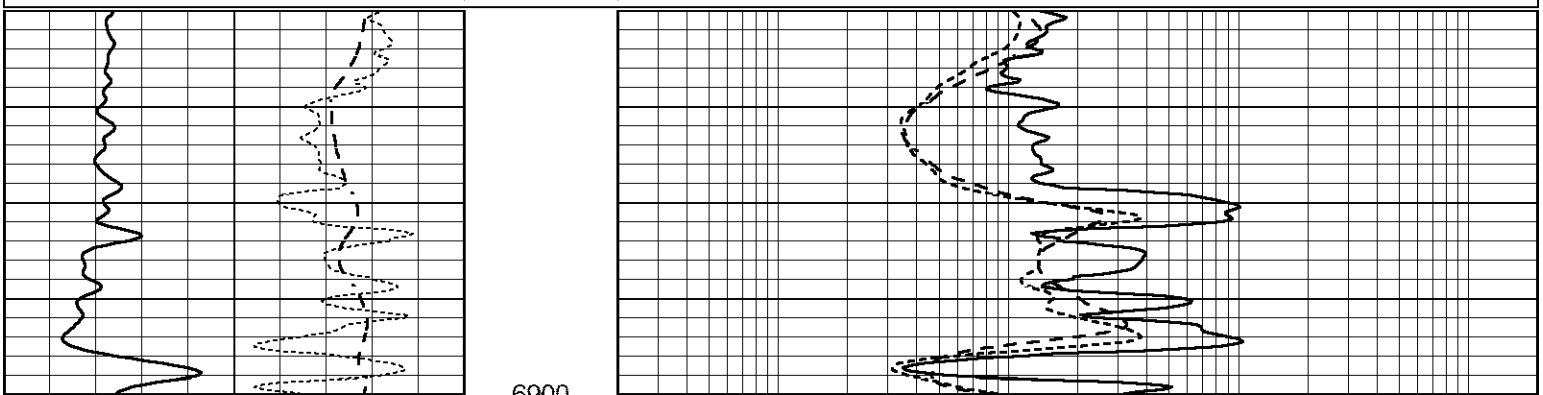
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

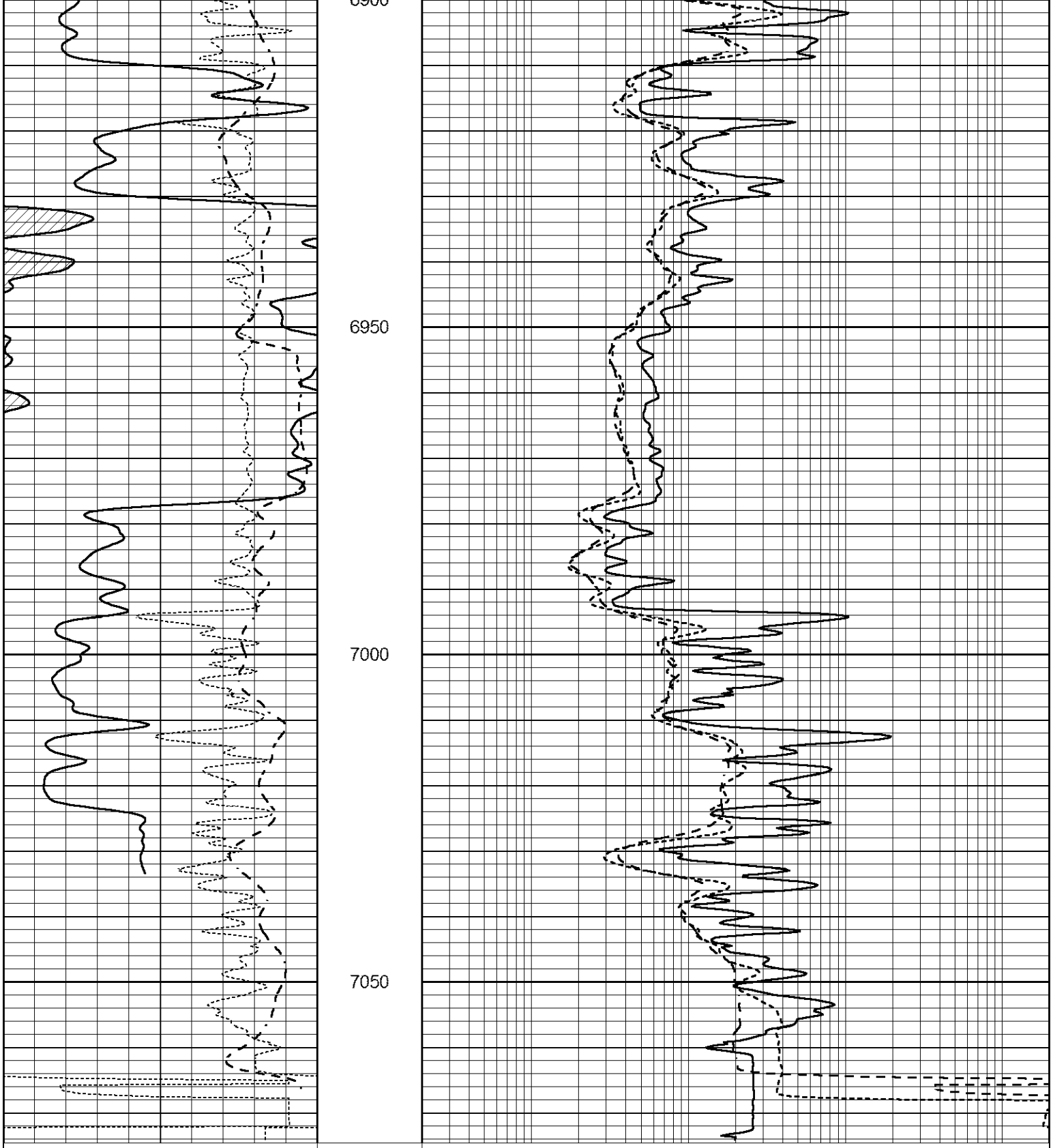
REPEAT SECTION

Database File	7249pe.db
Dataset Pathname	pass2.1
Presentation Format	_dil
Dataset Creation	Mon Nov 14 06:49:44 2022
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000





Calibration Report

Database File	7249pe.db
Dataset Pathname	pass3M
Dataset Creation	Mon Nov 14 06:44:26 2022

Dual Induction Calibration Report

Serial-Model:	FW1410-55-Probe
Surface Cal Performed:	Thu Jun 30 01:48:00 2022
Downhole Cal Performed:	Tue Feb 19 11:44:24 2019
After Survey Verification Performed:	Tue Feb 19 11:44:27 2019

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	650.000	-3.000
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	-10.500
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report

Serial: 140704
Model: V4_10P
Source Number: 74GBq-19

Master Calibration — Performed: Tue Oct 25 14:02:07 2022

	Background	Aluminum	Magnesium	
Window 1	501.98	5377.33	23235.87	cps
Window 2	38.66	1167.13	5462.52	cps
Window 4	219.95	1265.38	5296.65	cps
Window 5	535.47	7345.58	14269.59	cps
Window 6	42.48	1172.64	2113.12	cps
Window 8	252.82	2368.74	4743.90	cps
Bulk Density	-	2.6020	1.6830	g/cc
Pe	-	3.0000	2.5070	b/e

LS Alpha:	: -1.8018	SS Alpha:	: -0.8503	LS CPE:	: 1.2527
LS Beta:	: 116585.8005	SS Beta:	: 19984.2984	SS CPE:	: 1.5732

Before Survey Backround Counts Verification — Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps

Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

After Survey Background Counts Verification — Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

Lithodensity Caliper Calibration — Performed: Tue Oct 25 14:02:07 2022

Results Readings		References (in)			
Low	High	Low	High	Gain	Offset
9378.6	12243.0	8.0	14.0	0.0	-11.8

Before Survey Caliper Verification — Performed:

	Reference	Reading
Caliper (in)		

After Survey Caliper Verification — Performed:

	Reference	Reading
Caliper (in)		

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 7
Tool Model: Probe1
Performed: Thu May 26 08:56:46 2022

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Calibrator Reading:	1.0	cps
Sensitivity:	0.5500	GAPI/cps